

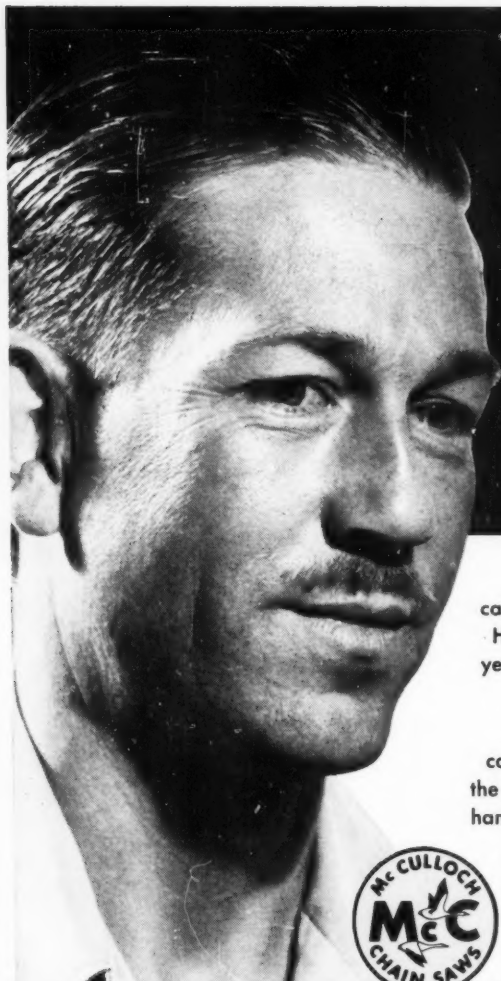
An aerial photograph of a forest landscape. A winding road or path cuts through the forest, leading towards a small building or structure. The forest is dense and dark, with some lighter patches of ground visible. The overall tone is somber and naturalistic.

AMERICAN FORESTS

NOVEMBER 1949

50 CENTS

Annual Meeting Issue



"Looked at all, then bought McCULLOCH"

says Alhambra City Forester

J. G. Stel, forester for the City of Alhambra, California, made a careful study before selecting a chain saw for the city's forestry program. He wanted a saw light enough to take up into a tree when necessary, yet with ample power to cut rapidly through big pepper trees, palms, etc.

He chose a McCulloch on the basis of demonstrated performance.

Now, after months of constant use, he and his department are completely satisfied* they made the wisest investment. Mr. Stel estimates the McCulloch chain saw has increased the capacity of his department in handling removal and surgical work on Alhambra City trees by five times.

*After watching the McCulloch perform on city work, Mr. Stel and five other members of his department bought one for their private use!



NATIONWIDE SALES AND SERVICE

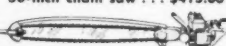
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The American Forestry Association is a national organization—independent and non-political in character—for the advancement of intelligent management and use of forests and related resources of soil, water, wildlife and outdoor recreation. Its purpose is to create an enlightened public appreciation of these resources and the part they play in the social and economic life of the nation. Created in 1875, it is the oldest national forest conservation organization in America.

AMERICAN FORESTS

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THE COVER

Piedmont Lake is one of the jewels in the crown of Ohio's famous Muskingum Watershed Conservancy District—an area that has been described as the cradle of the most extensive soil and water experiments in the world. This graphic shot by Herrin F. Culver of the Soil Conservation Service shows three specific reasons for the success of this valley program—controlled water, strategically-planted forests and farms operated under wise land use plans. Last month The American Forestry Association revisited the District and dedicated it as a classic example of dynamic democracy in action. To thousands of people the Muskingum program is the only answer for future valley development in America. It's a people's program. And it's getting results.

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LETTERS TO THE EDITOR

Now Is the Time

The article in the September issue, "The Challenge of Land Ownership," by Kent Leavitt and the excellent editorial relative to it are indeed most fine and timely, especially now when there seems to be such a laxity on the part of some of us in the realization of the drastic importance in the saving of both the soil and our natural resources.

Henry B. Chase, Jr.

New Orleans, Louisiana

Personal History

The publication of the picture of the first graduating class in forestry from Cornell University, 1900, recalls vivid memories of W. W. Clark, one of the graduates whose forestry background I am certain would be of interest to many of your readers.

Shortly after his graduation, Clark was employed by the Forestry Department in Washington, and early in 1902 was sent to the Philippine Islands with the first group making a study of forestry conditions there, under Captain George P. Ahern.

At that time, I was a member of the old U. S. Battalion of Engineers, stationed in the Philippines, and at the request of Captain Ahern, was attached to the Philippine Forestry Bureau for the purpose of making surveys and plotting the terrain on which forestry surveys were made. It was then I first met Clark, and we were closely associated in our surveys on various islands during most of 1902 and practically all of 1903.

Among other islands surveyed was that of Mindoro, which at that time was little known except on the coast. During our surveys of this island, we were located at Palaun, on the west coast, and after surveys had been completed in that section, Clark and I made a trip across the island, under extreme difficulties of weather, floods, etc. It is my belief that we were the first two Americans, if not white men, who ever penetrated the interior of this island, and in doing so were instrumental in upsetting several popular myths regarding it.

Later, we made a complete survey of Bataan Province, where General MacArthur made his famous stand, as well as numerous surveys in other islands. I left the Philippines the fall of 1903, Clark remaining approximately a year longer when he returned to this country and later took a position as forester in Arizona, with headquarters at Flagstaff. We corresponded for a couple of years, but as is usual even among closest friends, the correspondence gradually broke off. In 1910, I contacted the U. S. Forest Service at Washington for information as to Clark's whereabouts and was informed by them that in the winter of 1909, while stationed on top of Flagstaff Mountain, he died of pneumonia, due to the inability of a rescue party to reach him in time. The remarkable point of this was that he died just before the rescue party's arrival, and that his records were kept up to within four hours of the time of their arrival.

I might add that he was in many ways a remarkable man, one whom I admired so

much that I named my son after him. If he had lived, he would undoubtedly have left a splendid reputation of achievement in the forestry field.

Hudson H. Bubar

Old Lyme, Connecticut

Request from India

I have been receiving *AMERICAN FORESTS* for more than a year and have enjoyed it immensely. It is a magazine of high standard.

However, this letter is primarily a request for information. I am interested in compiling a history of tree-planting in the world. It occurred to me that some of the readers of your magazine would either have or know of information on this subject that I do not have access to. Letters from any persons in regard to this would be greatly appreciated.

M. Prakash, M.Sc.

B.Sc., Forestry

Jaipur (Raj.) India

Glad You Like It

We think your magazine is one of the finest and handsomest available today. It is a relief to find one which contains no trash. As for the covers, they are always beautiful and it is not necessary to use any more color. It would cheapen the effect. The contrast of a gray picture and colored border is charming, indeed.

H. W. Stevens

Montclair, New Jersey

Positive Selection

I was very pleased to read Russell Stadelman's fine article "Growing Quality Hardwoods" in your September issue and want to add the following point:

There are two ways to grow quality timber. The first one is very well illustrated in Mr. Stadelman's article. The aim consists in cutting all the inferior species and low-grade trees—a selection of the negative elements. The second way is to select the best candidate out of each tree group and mark his worst aggressor for falling. This is the way science and practice went in my native country, Switzerland. It is a selection of the best ones, the positive elements.

I am strongly in favor of the positive method. One of the reasons is that cutting of all the undesirable trees is not very profitable and often a waste of time. I think that improvement cuttings should eliminate trees either decadent or crowding candidates only. The remaining trees will fill the spaces between and under the candidates selected each cutting for maximal growth and reproduction.

Analyzing Russell Stadelman's article we find that Nickey Brothers of Memphis switched apparently halfway to the positive selection. For on page 39 we read: "... only the trees which had practically stopped growing, or which were interfering with other better quality trees, were marked for cutting."

Louis O. Vogel

Wendling, Oregon

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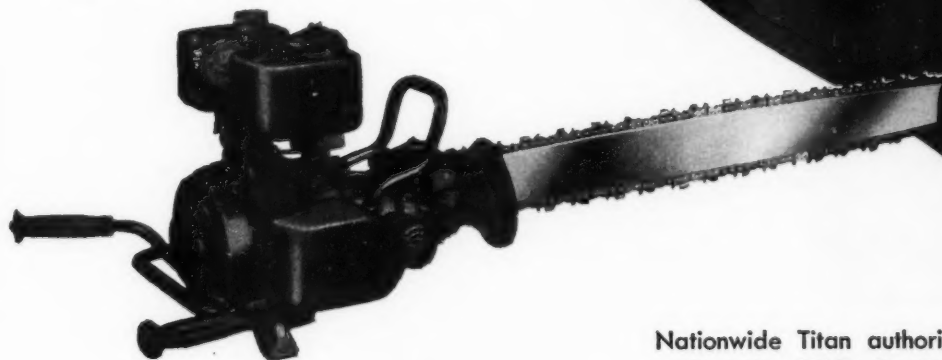
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The Dingell Bill—Pro and Con

Statement made by A. G. Hall in the September "Washington Lookout" with reference to the Dingell bill, amazed and irritated me as it no doubt did millions of others.

Mr. Hall stated in part, "While this is a desirable measure from the standpoint of the sportsmen, it appears to be another case of the federal government doing a job which should be done by the states."

If Hall is not familiar with the pulse of the public and has no time to make adequate inquiry, why isn't he instructed to merely write the facts? With the exception of referenced item, your publication has been doing a very good and comprehensive job with "Washington Lookout." It's too bad you permitted a dead fish to contaminate it.

The damage is done now as there will not be another edition of AMERICAN FORESTS before President Truman is presented with the bill for signature. (The President vetoed the Dingell bill on October 12.) However, this complaint still appears to be in order as a preventive to future unwarranted attacks on wildlife restoration projects.

It is true that states should perpetuate and rehabilitate its fish and wildlife to the best of their ability, but sometimes a saturation point is reached. Sometimes, too, an idea is advanced that pushes this saturation barrier ahead a little farther—such is the Dingell bill.

The excise tax on fishing tackle has been a smooth extraction of funds from the sportsmen to pay general government expense for years. It could and perhaps would continue for years, so why shouldn't the citizens who pay this particular tax bill benefit from the cost to them?

Generally speaking, our various state wildlife agencies are doing a good job with their limited resources. But in California, for instance, with almost two million who fish and hunt, the \$9 cost of licenses is about all the traffic will bear to meet this tremendous pressure on fish and wildlife. Even our youngest child must pay to hunt and every boy and girl over the age of sixteen must pay \$3 to try and catch anything that swims.

Our regular fish and game revenue from the sale of licenses was augmented sometime back by legislative action appropriating \$9,000,000 from state horse race funds. This was a mere drop in the wildlife bucket, as approximately \$50,000,000 in proposed projects to utilize these funds were submitted for consideration. This would have been increased by many more proposals if the sportsmen had been able to see any results, but the wheels of any government grind slowly and sportsmen become impatient and lose interest.

Obviously Mr. Hall finds no favor with the Pittman-Robertson Restoration Act and the approximate \$3,500,000 returned annually for the last ten years to states as excise tax on arms and ammunition for the restoration of wildlife.

The Dingell Bill should result in approximately \$5,000,000 (monies actually contributed by anglers) a year to improve fishing conditions. How is Mr. Hall going to explain to over 25,000,000 anglers that their fishing needs no "shot in the arm" with help from the U.S. General Fund paid in by those same fishermen?

Mr. Hall suggests the states levy this manufacturer's excise tax. In California we have few such industries and the "take"

would be insignificant in comparison with the thousands of dollars California anglers would pay in tax on eastern manufactured tackle and as a result make contributions to the improvement of fisheries in other states. To add insult to injury, those same states would charge California sportsmen a premium in non-resident licenses for the enjoyment of participating in something they had helped to improve.

G. W. Philpott
President, Sportsmen's Council of
Central California

Fresno, California

Readers should note that Mr. Hall, while a supporter of wildlife restoration, is also keeping an eye on the taxpayers' dollars—as he puts it, "to obtain the greatest return for the dollar spent. The conservation dollar wears mighty thin when it must first travel from the point of origin, and return, before it is translated into fish, forests or streams."

As for the use of the excise tax, Mr. Hall asks, "Shouldn't we also use the tax on golf clubs for the extension of federal-state cooperative country clubs?"—Editor.

A Reader States His Problem

In your letter welcoming me as a new member you asked me to write you if I had a problem within your province. We are all faced with such a problem—the increase of population and the decrease of topsoil—and to try to meet it I have decided to convert our dairy farm to a tree garden. Before coming to this decision my wife and I lived for a year exclusively on fruit and nuts (with the addition of green leafy vegetables) and as a result of actual experience I now believe that the fruitarian way of life, as advocated by Gandhi and many others, is not only possible but also more economical, more healthful, and more conducive to spiritual progress, than the usual way of feeding animals and then eating them.

To help me carry out my experiment I would very much appreciate your telling me what kinds of nuts will grow in northern New Hampshire and where I may get tree stock which will bear nuts with the largest kernels and the smallest shells. Also what fruit trees will stand the cold New Hampshire climate. I have read that in a mountain region in northern India, where there is ice and snow part of the year, the Hunzas grow apricots. I would like to experiment in growing apricots and other fruit trees *en espalier*, flat on the ground, so they may be covered with straw to avoid being winter-killed. Since meat and cereals are not essential to man's health and happiness, I hope to be able to demonstrate that any farm which is now a stepping stone to the slaughter house may gradually be transformed into a beautiful garden of nut and fruit trees.

Woodland Kahler

Littleton, New Hampshire

Leica Lens Cap Found

A lens cap for a Leica Elmar 3.5 lens that was lost at Malabar Farm on October 13 by a member of the AFA visiting party has been turned in to the Association by L. A. Danse, of the General Motors Corporation. If the person who lost the cap will send a card to the Association the cap will be returned to him.

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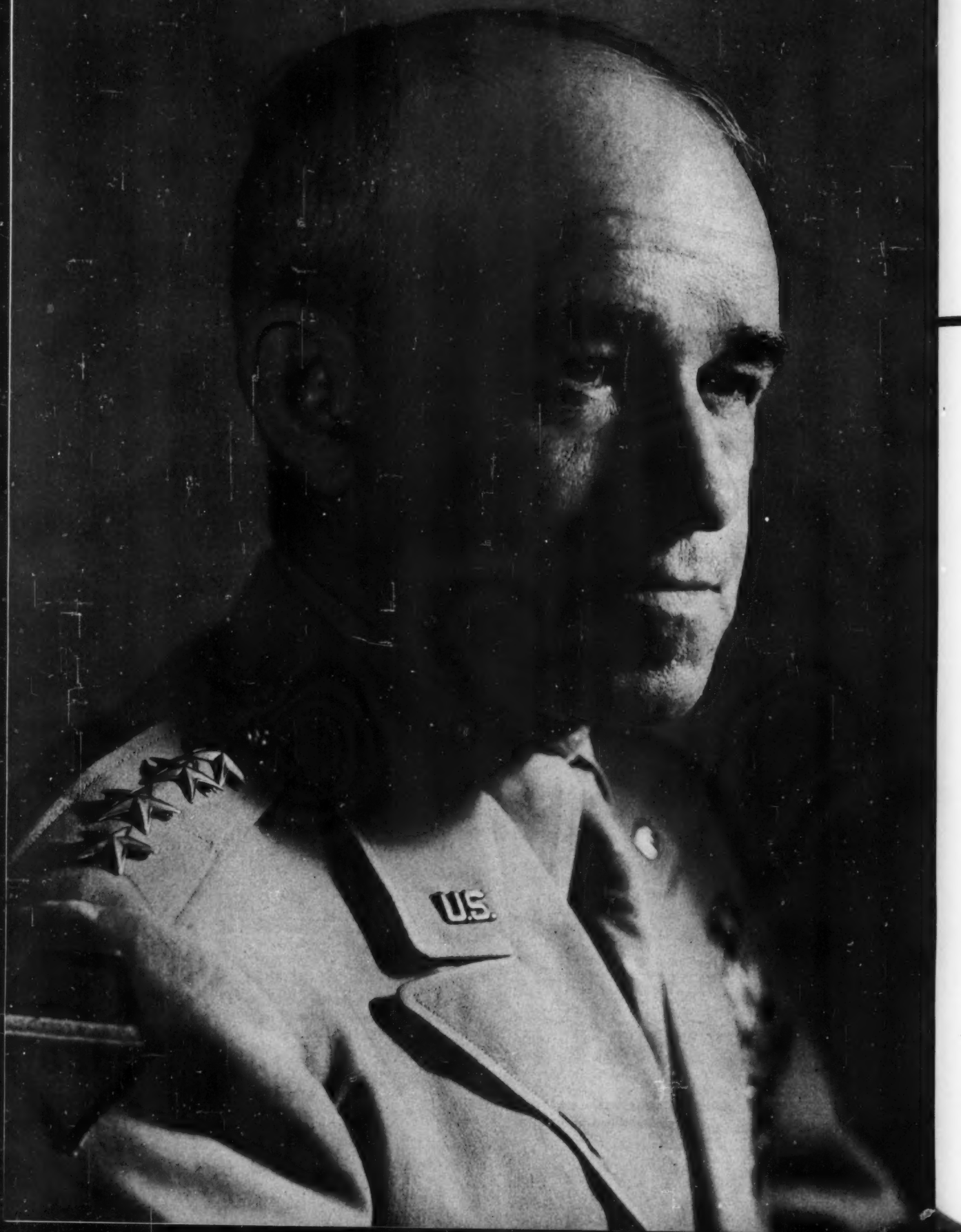
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The Red Atom

A new phase of our struggle for peace has begun, now that Russia has the atomic secret. General Omar N. Bradley reports there are sound plans to mobilize human and natural resources for security

By OMAR N. BRADLEY
Chairman, Joint Chiefs of Staff

The world today stands almost transfixed in awe of the tiny, but powerful, atom. Its power to destroy overshadows in every mind its power for helpfulness.

So long as we alone held the atomic weapon, we could be sure that no atomic bomb would start another war. Hoping to turn its power to peaceful gain, we offered it to international control; we used its silent threat to deter any quick aggression; and we used the breathing time for peaceful reconstruction.

Just as we knew that Soviet scientists soon would solve the atomic riddle, so did we realize that on Red Atom Day a new phase of our struggle for peace would begin.

As calmly as they have taken the pronouncement of that discovery, Americans and their friends await further information on our collective security plans.

Although defense problems cannot be entirely solved by spending, I do believe that we must now review our *rate of spending* for certain previously planned installations and developments of our national security establishment. For Russia's atomic explosion takes its earliest effect on our defense pocketbook.

I believe it will call for even more wisely placed security investments—and some sensible thrift. For as Mr. Bernard Baruch has stated, we must not "delude ourselves into thinking we can spend our way out."

As your military counselors, the Joint Chiefs of Staff can make the estimates and draw up the plans. However, modern war is so complicated and complex that there will always be different views on how our present defense dollar should be invested. In the end, the American taxpayer must pay the bill for his own security; thus he is vitally interested

in this problem. The present unsettled world conditions make the question of defense an important one for every citizen.

Facing the awesome possibility of a war at some indefinite time in the future, and knowing that we cannot tell exactly when that sometime might be, we realize that we cannot maintain sufficient armed forces and modern weapons to provide absolute security. On the other hand, we have the comforting knowledge that the United States of America, and its newly allied friends of the Atlantic Pact, will never *start* a war for *any* purpose. This increases the possibility of having no war at all.

However, facing all the international facts of life, you realize that there is a large land-based power in the world today that *might* start a war.

Whether motivated by misplaced fear of attack or by schemes for aggression, Russia has maintained an army of 2,500,000 men. Her air force numbers over 600,000 men, with somewhere between 14,000 and 16,000 aircraft. And, adapting German submarine models, she has developed a very modern undersea force. Since VE-Day, she has devoted

a large percentage of her industrial capacity to the maintenance and modernization of her armed forces.

And two weeks ago, the Soviet Union—the only possible enemy in sight for the next twenty years—threw into the balance its newly revealed possession of the atom.

Keenly aware of our position, Americans have not been living a grasshopper summer to be confronted now with the chill of unpreparedness. Our own Army, allotted 33.6 cents of the security dollar, has been steadily rebuilding, while carrying on the occupation duties to which it is assigned. The Air Force, given 34 cents of the defense dollar, has progressed steadily in size and ability, and the Navy, allotted for the present fiscal year 32.4 cents of the defense dollar, stands second to none in the world. Hence you will see that our three services have approximately equal shares of our defense dollar.

The American people realize that the first prize for any aggressor in the world today might be Europe, with its industrial potential and its market for goods. So they have reaffirmed in economic aid, and by political tie, that the Western Europe which we have twice defended is linked with this continent in peace, and for protection. The President early in October signed a Military

The American Forestry Association's 68th Annual Meeting was the occasion of this major policy address by General Omar N. Bradley, chairman of the Joint Chiefs of Staff. A leader who was thrifty with the lives of his men in World War II, General Bradley here attains new stature as one of the key conservationists of our time. Certainly the whole future of our country—the world, in fact—depends in large measure on the control of this deadly new force that threatens the very existence of civilization as we know it.

Assistance Program to speed up the military rehabilitation of those nations whose ideological and security interests are held in common with our own.

The basic defense principle of the North Atlantic Treaty, and of the military aid program, is that each nation shall contribute those things which it can best provide in the collective security plan. And in dividing our own defense dollar in future years, it is this same principle which must override wishful adherence to prestige, time-honored tradition, or biased enthusiasm for any one of our Armed Forces, as we contribute our share.

Even in friendly eyes, American resources and industrial production can be objects of envy. Then add to these our possession of stockpiles of the atomic bomb, and the security of distance from the possible battlefields of Europe. The sum total of our strength must seem infinite. But we who have lived with the treasure, in the well-fed comfort of prosperity, know that money for defense is a valid expenditure only so long as it is an investment in peace. Unlimited expenditures for weapons of war would quickly spell bankruptcy for our economy.

To gain maximum safety at the least expense, the Joint Chiefs of Staff must give very careful consideration

to those items which constitute the basic necessities.

First priority must provide those forces which can avert disaster in the event that war is thrust upon us and our friends.

To impress the aggressor that a bully's blow can't escape the sting of reprisal, we must possess the means to retaliate quickly and hard.

And finally, knowing well that blows once exchanged do not subside until one or the other is victor, we must provide the means necessary for the mobilization of our manpower and other resources which can eventually carry the war back to the enemy, to his ultimate defeat.

These are the priorities which have governed our plans so far. Now with certain knowledge that atomic weapons, by plane or by missile, could be used against us eventually, we must choose carefully the further armaments of defense.

Your President, your Secretary of Defense, and your military counselors have assured you that this calls for no change in basic defense plans. When we ourselves have leaned so heavily on our monopoly of the atomic bomb as a deterrent for war, it is natural for Americans to doubt this statement.

These assurances are sound, and I will explain the merit of their meaning.

The Joint Chiefs of Staff have anticipated that the Russians would, sometime, solve the problem of atomic weapons. We have pointed out that in the second phase of the atomic problem, America and her friends will have a continued respite from attack, because of the preponderance of our stockpile of atomic bombs and our lead in men and planes to deliver bombs on any aggressor. That phase exists today. How long this condition will exist, no one knows.

Estimates in our staff on when the Russians would have the atomic bomb ranged from 1950 to 1952. Their "atomic explosion" preceded the earliest of these estimates by several months.

Estimates have also been made of the time from this first announcement until the Russians could have enough atomic weapons in quantity to influence the outcome of a modern war.

They could be foolhardy enough to launch an atomic attack with only a handful of atomic bombs. But of all the people on this earth, they are students of force, and of power in war, and should understand clearly the disastrous result of such a gruesome error.

In the meantime, I earnestly hope that they will see the difficulty and tremendous expense of atomic manufacture, and shall come forward to join us in international control of such a weapon.

But military men must be realists. You depend on them to be prepared. We have worked out an orderly timetable of preparations for atomic defense. Like a plan for mobilization in case of attack, it was tied to a day in the future on which a specific event should come to pass. That day has now arrived—Red Atom Day—and our program to provide for defense in this second phase is already well underway.

The American people might logically inquire: If we knew that this day were sure to come, why couldn't those preparations have begun a long time ago? The answer is, obviously, that common denominator, the defense dollar. Our earlier preparation for the preponderance of might, and the stockpiling of atomic weapons, and the general refurbishing of our armed forces required all of the defense money our economy could stand.

Further realizing that when this
(Turn to page 44)



General Bradley chats with AFA President Spurr at the banquet
Howard J. Ward



Photos by Akron Beacon Journal

Akron naval and civilian dignitaries greeted General Bradley at the Naval Air Station. Left to right: Mayor Charles Slusser, Commander Edward Beech, General Bradley, Captain David Shafer and A. G. Hall, AFA forester

Showing a genuine interest in AFA's Conservation Awards, General Bradley inspects the plaque given Bryce C. Browning



The West's 3-Way Water Problem

The sixty-four dollar question in the harnessing of the West's water is who will do the job? Here is one answer

By Ralph Carr

There are three major problems confronting the people of the semi-arid West today involving riverflows and the natural resources of the basins in which they flow. Peculiarly, two of the answers must be returned by the Congress and the third will call for a judicial determination by the federal courts.

There was a time when the necessity for the development of the products of riverflows and the land resources of the West did not loom large in the minds of the people of the rest of the nation. The situation would seem to have changed greatly in the last few years, however. Interested persons and the members of Congress, in particular, are agreed that national funds must be allocated for the construction of dams and other river structures to impound and use water for irrigation, domestic and industrial uses while the resources of the soil are fully developed for the benefit of the people of the entire country.

The \$64 question involves only by whom the work is to be done.

Shall existing government bureaus and agencies go forward under existing laws with local interests and the states participating? Or shall a government corporation, comparatively recent in its origin which has operated under the name of Valley Authority until now, but which in the case of the Columbia River Valley is dubbed an Administration, take over? The term "take over" is used advisedly.

The West is actually seething with interested debates, newspaper articles and sidewalk controversies, while the members of Congress are bombarded with the contentions of ardent proponents and opponents of the new device.

The second question comes from the Pacific Coast where the validity of the first of the great interstate river compacts is under fire. A signatory



Bureau of Reclamation

Dry farming in much of the West is a precarious occupation. This abandoned farm in Montana is symbolical of many similar failures

to that compact is laying claim to more water than earlier interpretations have accorded it. The opposition of California to the confirmation of the Treaty with the Republic of Mexico which allocated a portion of the flows of the Colorado River and the Rio Grande to the sister nation, forecasts a lasting battle with the Upper Basin States which arouses concern and uncertainty and which may result in delays in the development of the Colorado Basin.

The third question which holds the spotlight in the attempted settlement of water matters involves a suit which has been commenced in the United States Court for the District of Colorado, by the Attorney General at the request of the Department of the Interior in the name of the United States as plaintiff.

While the people of the western country reap harvests from their current crops, they dream of other acres to be cleared and cultivated, of graz-

ing lands to be opened, of timber to be cut, of mineral deposits to be torn from the ground and converted into helpful machinery and gadgets for general consumption. And through it all they realize also the billions of units of hydro-electric power which should lighten and brighten and bless a world of industrial possibilities.

In short, a new era is dawning in the land of the mountain crag and the prairie dog, in the section where water is life and where its harnessing and subjugation will spell growth and better living and the answer to so many human problems.

These three problems are so inextricably commingled and intertwined that it is sometimes difficult to determine where the quarrel over the establishment of Authorities leaves off and the legal arguments over the interposition of the federal government in its assumption of the adjudication of water rights begin.

The situation results not at all from



But application of water to the sagebrush flats of western valleys and plains by irrigation produces crops unmatched in eastern states

any change in the character or the quantity of the potentialities of the riverflows and other natural resources. The water, be it said, is no wetter now than it was half a century ago. Aside from the improved machinery which is now available for a cheaper, more efficient production of hydro-electric power, there has been no basic change in the power business. God's trees can be cut into approximately the same number of board feet as was possible before the Authority question was ever broached.

The changing situation stems directly from the noble experiment which induced the Congress to appropriate upward of a billion dollars for the Tennessee Valley Authority. It was there demonstrated that national funds can and should be used for the full development of a whole river basin, although it may involve the lands of as many as ten, and possibly more, states.

May it be asserted that the only value of the TVA idea, so far as the development of western river valleys is concerned, consists in this fact alone. No western state, no understanding westerner would deny the people of the Tennessee Valley all the good which they feel is being drawn from that experiment if the people and the state governments really want it and the Congress is willing to indulge the rather expensive project.

The protest of those in the West who oppose the interposition of a government corporation in the region of scanty rainfall arises from the fact that there are few comparable conditions in the arid West which would justify the same method of development which the Tennessee Valley has found desirable.

Since the earliest migrations into the section which Major Stephen A. Long condemned in the 1820's as in-

adequate to support a white man's civilization, plans have been framed and hopes have been built on the idea that dams might be constructed to furnish supplies of irrigation water, to protect from annually recurring flood dangers, to develop mineral resources and to supply domestic waters for the great cities which were certain to follow. The need for soil protection, the better culture of grasses and hays for the feeding of livestock, and the development of hydro-electric power and all the other varied products of land and water have received earnest attention.

The proponents of Authorities with powers over persons, rivers and their basins, which the Congress under the Constitution probably does not have the right to grant, point to the failure to build great river structures such as are now contemplated as one of the chief reasons for the establishment of Valley Authorities following the formula of the TVA.

RALPH CARR served as governor of Colorado for two terms (1939-1943). He is now practicing law in Denver, but he devotes much of his time to speaking tours in the interest of constitutional government and the preservation of the American system by the protection of the rights of the individual. He is particularly well versed in the West's water problems, having specialized in irrigation law and represented Colorado in interstate litigation and compact conferences on rivers of the West. He is a member of the Natural Resources Committee of the U. S. Chamber of Commerce.

The West has been slow in developing, it is true.

It is also true that the Bureau of Reclamation has lived a precarious half century with each incoming Congress toying with the thought that any appropriations for that agency were probably unjustified. It has often been charged that the West has never repaid the national government the purchase money for the Louisiana Purchase. Many westerners seeking appropriations for river projects have felt the sting of the claim that they were merely sons of wild jackasses.

We do not forget, of course, that through the last fifty years, certain worthwhile projects have been made possible by the use of national money. We cannot overlook, for instance, the Coolidge, the Hoover, the Grand Coulee, the Bonneville, the Fort Peck, and the Elephant Butte dams. We of Colorado will never cease to be grateful for the idea which drove a tunnel thirteen miles through solid granite under the continental divide to carry water from the Pacific watershed for the production of hydro-electric power and at the same time furnish a supplemental irrigation supply to the Sugar Bowl of northeastern Colorado, in the Atlantic watershed.

But the works which have been constructed are a drop in the bucket beside the thousands of other worthwhile projects which might have been financed had the country and its leaders been alive to the value of the natural resources of the semiarid section.

Great debates are being staged in every town and hamlet along the Columbia River and its tributaries as well as in the areas outside the basin proper, to which the pending bills in



the Congress would extend the jurisdiction of the Administration.

In few election campaigns have the people as a whole been so well informed as they are today of the pros and cons of this proposed installation.

From the proponents of the CVA comes the interesting argument that only a board with powers as great and in many ways broader than those exercised by the TVA, can secure sufficient appropriations from the Congress to accomplish the full development of that basin's possibilities. Next it argued that the congressional setup is such that the many federal agencies cannot offer to the Congress a comprehensive report such as a five-man board can present.

And, finally, it is charged that existing agencies, even with the aid of the states involved and supplemented by interstate and interdepartmental agencies, cannot do the job as well as a three-or five-man board appointed by the Chief Executive and responsible only to him.

To these persuasive statements opponents reply that an Authority with the power of eminent domain, financed from a bottomless pocketbook such as that which built a score or more of dams on the Tennessee Riv-

er, barring all other legally constituted government agencies from the Authority area violates federal and state constitutions, seizes individual rights, property and privileges and establishes a superstate with powers which the states, and, even the federal government, have never claimed before. They point to the activities of the TVA as the strongest reasons for their objections.

Few proponents of Authorities can visualize the certain ill effects of the establishment of a three-or five-man board with power to purchase the rights of thousands of water users under the state laws, nor do they understand how rights to the use of water have grown from the very necessities of life in the western states.

The old law of riparian rights to water was imported from Europe into the states of the East and the Middle West.

The first settlers in the West found that gold-bearing ledges were seldom located adjacent to flowing streams whose water was needed for the recovery of the yellow metal. Congressional acts and Federal Court decrees immediately met the need for laws which would justify the transportation of water from its original shed into areas where it could be better

used for placer mining and for the cultivation of the soil. The law which always extends her provisions to meet the requirements of new situations solved the problem with the announcement of a doctrine, novel in this country, but as old as Hammurabi himself and the first irrigation on the upper reaches of the Nile.

It was early demonstrated that the application of water to the sagebrush flats of western valleys and plains by artificial irrigation would produce crops the like of which they had never experienced in their homes back East.

Unfortunately, there rarely flows in any western stream, sufficient water to satisfy the demands of its water users. This, of necessity, gives rise to a need for the classification of various claimants. From such situations was born the doctrine, *First in Time, First in Right*. The appropriation theory which recognizes priorities to the use of water by the relative dates of actual diversion and application to beneficial use was invented.

Rights to water where it is scarce are purely usufructuary. The title to the corpus of the water is never transferred to the water user because of the volatile nature of the subject mat-

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The West's entire economy, including the cattle business, was founded on ownership of individual water rights. Today, unfortunately, few streams provide sufficient water to satisfy all users

U. S. Forest Service Photo



Conservation and Population

The earth is getting more populated all the time. Our very survival depends upon conservation of our natural resources

By GUY IRVING BURCH

TODAY there are approximately 2,300,000,000 human beings on the earth, 1,500,000,000 of whom are undernourished. Accentuating this state of worldwide undernourishment is the fact that there are about 25,000,000 unnecessary or premature deaths, resulting largely from lack of food and sanitation, each year. Yet, the population of the world is increasing at the rate of one percent a year which, if continued, would cause the earth's inhabitants to double in seventy years.

How can progress be made under these conditions? For one thing, we must, as far as humanly possible, conserve the natural resources we now have. And we must try to produce new resources and find substitutes and synthetics for those resources we may not be able to conserve. Some chemists tell us they can make food out of such raw materials as wood and coal, or that the problem can be solved by yeast and algae.

But the conservation of the resources we now have, and the possible production of new resources and synthetics will not bring us security and progress unless we give some attention to the problems produced by population growth.

For example, if by increased food supply or sanitation the high death rates of industrially backward areas could be suddenly reduced to the level of the death rates in western countries, the population of the earth would increase much more rapidly.

Few realize what this would mean. Perhaps the best illustration is that if India's death rate could be lowered to the level of that of the United States, and the present birth rate continued, that country could fill five earths, as full as ours, in a single century. China could do the same thing, and it would not take Russia or Latin America much longer.

It is evident that no chemist, by making food from wood and coal, or no advocate of yeast and algae, can

give us security and progress unless human beings learn to bring their reproduction—their population growth—under rational control.

Some may turn away from this problem in pessimism and say that it can never be solved. But let us see how the people of Great Britain, for example, have learned to control their population growth in a relatively short time. According to the report of the Royal Commission on Population, June 1949, had the nineteenth century size of family continued in Britain it would double the population in less than thirty years and increase it a thousand-fold in less than 300 years. In other words, if the nineteenth century size of family continued, the population of little Britain would reach forty-nine billion in 300 years, or more than twenty times as large as the present population of the entire earth. Yet Britain has learned to reduce her birth rate to a level which will just reproduce the present-sized population.

By learning to control her population increase, Britain has been able to escape the high death rates which are so common in industrially backward areas of the world. But of even

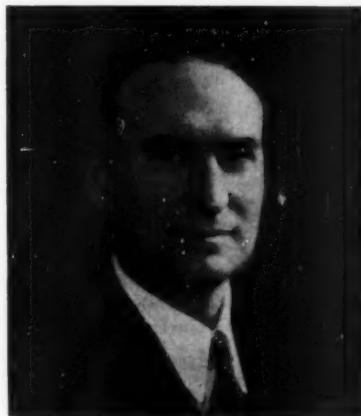
greater importance, if other peoples can learn what the British have learned, it can make possible a most effective program of conservation of the world's natural resources.

Perhaps the most basic cause of the reckless destruction of natural resources is unnecessary population growth. This has been repeated over and over again in history, and we have one of the best examples of this process in the making right here in the United States.

Let me quote a passage from the book *Vanishing Lands* by R. O. Whyte and G. V. Jacks to illustrate this point:

"The immediate needs of the rapidly increasing European population in the 19th century necessitated an unrestrainable exploitation of new virgin lands without regard to ultimate consequences . . . Europe took everything that the new countries could send, and the latter willingly bartered their life blood for the amenities of civilization and the opportunities offered for national and personal advancement. . . That the New World was being robbed of its soil and was being paid in coin that brought no

(Turn to page 43)



GUY IRVING BURCH is the founder and present director of the Population Reference Bureau of Washington, D. C. Organized in 1929, the Bureau's chief function is gathering facts from many sciences on population-resource problems of the world and interpreting these findings for the layman. It supplied the Joint Army and Navy Selective Service Commission with age group data for the original draft bill in 1940. Mr. Burch is the author of numerous articles dealing with population and its analysis.

What Conservation Means to Business

Essential materials, customers with greater ability to buy, more productive employees, greater returns to stockholders, successful management—here is conservation's challenge to business

By F. A. WIRT

Advertising Manager, J. I. Case Company

Business, for its own good, not only has the opportunity but also the responsibility to play a leading part in the conservation of renewable resources such as soil, water, forests, wildlife and natural recreation facilities.

Conservation offers business several splendid opportunities: (1) essential materials from farm and forest; (2) customers with greater ability to buy; (3) happier, more productive employees; (4) more satisfactory returns to stockholders; and (5) success to management. The extent of these opportunities will be determined in part by how effectively business lives up to the responsibility which usually accompanies opportunity.

Some sixty-five percent of the new wealth created annually in this country has its origin in agricultural and forest production, while thirty-five percent comes from certain non-renewable resources such as minerals, coal and petroleum. Lloyd Partain,

president of The Soil Conservation Society of America, has stated that as non-renewable resources become exhausted it is only reasonable to anticipate more dependence upon renewable resources.

The July issue of the *Survey of Current Business* reveals that national income from natural resources by industrial origin in 1948 amounted to \$27,371,000,000. Agriculture, forestry and fisheries accounted for \$22,468,000,000, or 82.1 percent of the total, with farm income alone amounting to \$21,967,000,000, or 80.5 percent. Mining, including petroleum, accounted for \$4,903,000,000, or 17.9 percent.

New wealth from land and water is not created from worn-out land, lost soil, lack of water, or forests which do not exist.

As an example of the importance of new wealth originating in farm lands and forests, the number of trucks engaged in hauling agricultural commodities is greater than the

number used for all other purposes. Consider what this means to highway construction, filling stations, garages, restaurants and many other kinds of business.

Again, fully twenty percent of all revenues received by railroads from carload traffic originates in the products of agriculture and livestock. By the time products are procured or manufactured and shipped again, the percentage of income from handling agricultural products is much larger.

In 1948, Class I steam railways in the United States hauled 145,175,685 tons originating in agriculture; also 16,865,397 tons of animals and their products, plus 86,104,228 tons of forest products, or a total of 248,145,310 tons in 7,883,956 carloads. Compare this with the 12,660,832 carloads of "manufacturers" and "miscellaneous."

Farm and forest products are of equal or greater importance to other lines of endeavor or business. Food and raw materials from the land are so important that industrial nations will go to war in order to have access to such materials.

The overall importance to business of materials originating from farm and forest is about the same as the importance of oxygen to human beings. Without the materials and oxygen, virtually all business and all human beings would simply pass out.

But what about the soil from which farm and forest products must come?

According to the Soil Conservation Service, farm land, formerly cultivated but now completely ruined for further immediate and practical cultivation, already totals approximately 100 million acres, or seven and a half times all the crop land in Ohio. Crop land, as yet only severely damaged by erosion, totals approximately another 100 million acres, or twelve and a half times all the crop land in Pennsylvania.



F. A. Wirt has been advertising manager for the J. I. Case Company of Racine, Wisconsin, for twenty-five years. A native of Nebraska, he graduated from the University there with a degree in agricultural engineering. Before joining the J. I. Case Company, he taught agricultural engineering subjects at Kansas State College, University of Maryland and University of Arkansas. He is a past president of the American Society of Agricultural Engineers, and is chairman of the finance committee for the Council of the Soil Conservation Society of America.

This figure of 100,000,000 acres of farm land is very significant. The 1949 wheat crop, one of the largest on record, was harvested from 75,481,000 acres, producing 1,129,081,000 bushels. The huge 1949 corn crop, second only to the 1948 crop, was grown on 85,780,000 acres with an estimated yield of 3,500,000,000 bushels. Contrast, if you will, the 75,000,000 acres of wheat and the 85,000,000 of corn in 1949 with 100,000,000 now gone, and another 100,000,000 acres partly gone.

What about present erosion? In spite of the splendid progress made to date in the conservation of soil,

other major factors in business—customers, employees, stockholders and management.

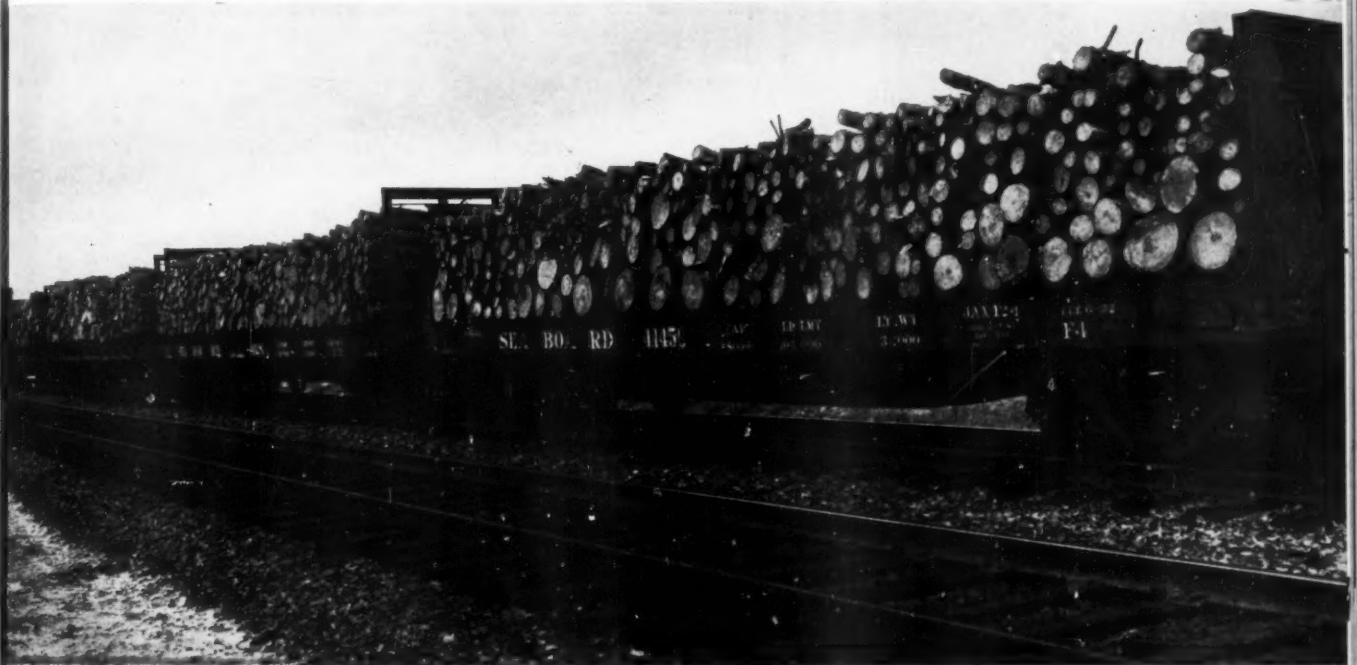
Still other factors, of course, will have a great effect upon the success or failure of business, but it is not the purpose here to discuss confiscatory taxation, enormous government expenditures and socialistic legislation, except to say that preservation of individual freedom of opportunity—the foundation upon which America was built—like preservation of our soils, is essential to the future well-being of the country.

Since the customers of business are people, it is important to look at the

with approximately forty percent rural and sixty percent urban. The rural, more especially the farmer customer, is exceedingly important to business. Thus the farmer's income, his ability to vote in the market place, deserves special attention.

The farmer's income is equal to the quantity which he grows times the difference between selling price and production costs, or expressed in a formula—Income = Q(SP-PC).

These three factors are almost entirely within the control of the individual farmer. Q, or quantity grown, depends largely upon proper land use. The same is true of produc-



The nation's railroads in 1948 reaped a profit on the hauling of more than 86,000,000 tons of forest products

water and timber, the Soil Conservation Service estimates that some 500,000 acres are now annually ruined for further immediate practical cultivation. That is the equivalent of 5,000 100-acre farms per year.

What would happen to business if, say, all the farms of Ohio were to become useless in one year for further immediate practical cultivation? From the standpoint of materials alone, conservation offers business a great opportunity to safeguard the sources of materials necessary for future operations.

Assuming an ample supply of materials and a favorable economic atmosphere, the opportunity conservation offers business becomes all the clearer when measured against four

population of the United States which is growing faster than many realize. The following table tells its own story:

January 1, 1930	122,497,000
January 1, 1940	131,456,000
January 1, 1949	148,000,000
November 1, 1949 (est.)	150,000,000

Increasing population means more business if the necessary materials are available, and if the customers have the ability to buy. The votes of the people in the market place determine the success of the individual business. What about the people's ability to vote, to buy, to give life to business?

Some twenty percent, or less, of our population are on the farm; eighty percent are in cities and towns,

tion costs. No one will question the greater purchasing power of the farmer living on rich soil, properly handled, over the farmer who lives on poor soil.

Mention already has been made of the large areas in this country where land once farmed is now of very little, if any, productive use. At least 100,000,000 acres gone, 100,000,000 are partly gone and 500,000 acres are going out of production annually.

No one should be misled by the fact that total farm income in 1948 stood at an all-time high. We are interested in business for the long pull. Business depends on the ability of people to make purchases — and when rich soil goes down the river

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The Honorable James H. Duff, governor of Pennsylvania, has long been an active and enthusiastic leader in conservation. His efforts within his own state to conserve natural resources have earned him national recognition as an authority in that field. Governor Duff's ancestors were among the early colonists in America, and they were pioneer settlers of Western Pennsylvania. He himself is the son of a Presbyterian minister, born and raised in Allegheny County where he still makes his home. He has been active in civic and public affairs all his life, although his only public office other than governor was as attorney general.

IT has become an American custom to dump into our streams every filthy and unwanted thing in our civilization.

Month after month, year after year, and generation after generation, as population multiplied and mining and industrial activity increased, we have used our streams to dispose of industrial wastes, acid mine drainage and the constantly increasing volume of sewage and garbage from congested areas of population.

For years on end, it never seemed to occur to most of our people that thereby we were slowly destroying one of our priceless natural resources and that some day there would be a terrific and costly reckoning.

As a nation, we pride ourselves upon our modern appliances, our progressiveness and our tremendous advantages, not only over other peoples in today's world but over generations before us.

We look back with disdain upon

Let's Outlaw Pollution!

There's no need to permit stream pollution to despoil our water supply. Public action can right this wrong

By **JAMES H. DUFF**

Governor of Pennsylvania

the filth and disease of the great cities of several centuries ago. In those days, dead cats and dogs, dirty wash water and garbage, and the body wastes from the old-fashioned commodes and slop jars were dumped into stinking open drains in the streets, where they bred disease and became menaces to the public health.

In our prideful day, we are more scrupulous in our attitude toward appearances. We haul our refuse away to some stream bank, to be caught up and carried along at the next high water. We discharge the body wastes from our toilets into concealed underground sewers. We neglect to remind ourselves, however, that the filth will settle into the stream when the water goes down and that these filthy and foul-smelling sewers empty themselves into streams, and that out of those vile and polluted streams at least one out of every two Americans gets his drinking water.

Modern methods of water treatment and filtration have largely eliminated from public water supplies the germs causing such calamitous, infectious diseases as typhoid fever, cholera, and amoebic dysentery. But they have not eliminated myriads of other enteric organisms that have been inhabitants of some one else's intestines, not long before they become residents of the glass of water on your table that you have drawn from some public water supply.

The polluted streams of America are real and growing menaces to the public health of America.

In most large cities it is an offense punishable by arrest and fine or im-

prisonment to bathe in the streams within the municipal limits. These regulations have become necessary as a precaution against the spread of disease, because it is almost sure to invite some type of infection to bathe in these polluted waters.

Yet these very streams where the public is prevented by law from taking a swim are the very same streams from which the public drinking water is obtained.

Innumerable instances might be cited of streams into which are poured untreated the discharges from hundreds of thousands of toilets from private homes, from public buildings, from jails, almshouses and hospitals, and yet only a few miles downstream these same waters are the sources of water supply for household use for great centers of population.

Several years ago, the chemist of the Wheeling, West Virginia, water works read a paper before a convention of delegates interested in the treatment of public water supplies. Therein he described the fluid in the Ohio River as it passed Wheeling as merely thinly diluted sewage. When we remember that the Ohio River carries a greater volume of water into the Mississippi than even the mighty Missouri, we can begin to realize what we are doing in America to our chief water supplies.

Various kinds of industrial and mine wastes make their contribution to the deterioration of our water supplies. There are large streams in this country with such acid content, as the result of pollution by industrial and mine wastes, that public water sup-

plies taken from these streams, even when treated for domestic use, are still potent enough to eat holes, within a ten-year period, in galvanized or brass plumbing.

A noted cancer specialist was asked his opinion of the effect of the continuous use of water of this type. He recited many observations of acute dermatitis in persons such as scrub women and dishwashers who had their hands and arms in water for considerable periods. While he would not undertake to identify any interior cancer as definitely linked to drinking such water, he did say that cancer was frequently caused by continuous irritations and he thought so much of the delicate mucous membranes of his own interior mechanism that he never drank such water if he could avoid it, under any circumstances.

Anyone taking the least trouble to inform himself must be aware that any further delay in adopting a program for nationwide clean-up of our streams and freeing them from pollution will be fraught with the gravest consequences to the health and welfare of our people.

In our endeavor to meet this challenge in Pennsylvania, we have under way an extensive and aggressive program of stream clearance. Possibly a brief statement of our program may be helpful elsewhere.

We have in Pennsylvania three great river drainage areas: the Ohio in western Pennsylvania formed by the junction of the Monongahela and Allegheny rivers at Pittsburgh, the Susquehanna and its tributaries in central Pennsylvania and the Delaware on the eastern border of the Commonwealth, with its chief tributary, the Schuylkill, which drains the principal anthracite coal fields and the industrial area extending northward from Philadelphia.

Almost one third of the people of Pennsylvania reside in the general area of the Schuylkill Valley and its tributaries. The vast majority of these people are dependent upon the Schuylkill River for water for both industrial and domestic use.

The corruption of the waters of this stream commenced in the early history of the Commonwealth. As population increased and towns grew in the valley, various kinds of pollution entered the stream. Then came the development of the anthracite coal fields and vast industrial establishments. The easiest and cheapest way to get rid of all types of waste was to dispose of them in the Schuylkill. And that was what happened.

The coal mines drained the acid from the mines into the river as well

as millions of tons of fine coal and culm produced in processing the coal. Industries of all kinds dumped their wastes untreated into the river. Then came inside toilets and underground sewers. All this filth likewise found its way into the river. In other words, all the compacted population of great industrial and mining communities used the river as a convenient and easy method of disposition of all their wastes.

The result was inevitable. What had been one of the most delightful streams of the Commonwealth became the most vile and corrupt. Yet as it grew more polluted, more and more people, as population increased, were dependent upon it for their domestic water supply.

People began to talk of the filth of the river and the necessity of doing something about it. There was talk but no action. Then in 1937 an ably

drawn, comprehensive law was passed prohibiting the pollution of the streams of the Commonwealth. The law was on the statute books but public opinion was still not strong enough to demand its enforcement. Both mines and industry contended that the enforcement of the law would threaten the industrial supremacy of the Commonwealth.

In 1945, the Pure Streams Act of 1937 was amended to prohibit the discharge of culm from the anthracite mines into the streams. Many of the coal operators contended with the utmost vigor that this provision would so increase their costs as to make their fuel non-competitive.

In response to an interested, if not an aroused, public opinion, the General Assembly of 1945 made an appropriation of \$5,000,000 to begin the clean-up of the Schuylkill. The
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What Man Does To One Of The Most Beautiful Gifts Of Nature—The River—By J. N. Darling





Lee Jackson, Firestone Rubber Company president, applauds as Miss Ethel Larsen, Federation of Women's Clubs executive, is introduced



L. A. Danse of General Motors discussed industry's water problems on panel at Oglebay



A. W. Marion, director of Ohio's natural resources department, (left) and P. W. Litchfield, president of Goodyear Rubber Co.



Louis Bromfield used microphone in conducting tour of his Malabar Farm

Photos by Howard J. Ward



At ease between sessions at Oglebay Park are (l. to r.) George R. Phillips, Department of Agriculture; S. L. Frost, AFA's executive director; Robert Hoskins, Seaboard Air Line Railroad forester; E. A. Wayne, Richmond Federal Reserve Bank; and Guy I. Burch, of the Population Reference Bureau

Meeting In the Ohio Valley

The 68th Annual Meeting of The American Forestry Association brings into sharp focus the paramount conservation issues facing the nation today — and prescribes for their solution

LED by General Omar N. Bradley, chairman of the Joint Chiefs of Staff, and other leaders from representative fields of American life, the 68th Annual Meeting of The American Forestry Association, held in cooperation with The Ohio Forestry Association and The West Virginia Forest Council in the Ohio Valley October 10, 11, 12 and 13, brought into sharp focus the paramount conservation issues facing the nation today and prescribed for their solution.

In fact, so important are these issues to the continuing strength, security and prosperity of our democracy that this entire issue is devoted to the conference, with numerous key papers presented in full.

Before a gathering of more than 300 members and delegates, including some of the country's top industrialists, General Bradley keynoted the conference with a major policy speech at Akron—a forthright declaration of our position in a "new phase of our struggle for peace" which began on "Red Atom Day," the day the Russians achieved the atom bomb. (See page 6 for full statement.)

Admitting the Soviet "atomic explosion" preceded the earliest of staff estimates by "several weeks" he quickly assured his serious-faced audience and millions of radio listeners that "Americans have not been living a grasshopper summer to be confronted now with the chill of unpreparedness." But, he added, "Red Atom Day" makes it necessary that the United States review its "rate of spending" for its national security establishment.

To point up his thinking in this respect he quoted a statement by Bernard Baruch that we must not "delude ourselves into thinking we can spend our way out." Money for defense, he emphasized, "is a valid expenditure only so long as it is an investment in peace. Unlimited expenditures for weapons of war would quickly spell bankruptcy for our economy . . . and a strong economy is our best resource against the onslaught of the poison of communism."

This life-and-death matter of keep-

ing the national economy sound while paying the bill for defense measures which fast-moving events necessitate threaded through the full four days of discussion and action. At Wheeling, West Virginia, where the conference opened, at Leesville Lake in the famous Muskingum Watershed Conservancy District of Ohio, where the meeting moved on the third day, at Akron and at Louis Bromfield's Malabar Farm, the theme was the same—how to achieve in the shortest possible time application of the most effective conservation measures to our basic natural resources.

A. C. Spurr, president of The American Forestry Association, opened the conference on this note, with the declaration that "a new type of interest is awakening in America"—a recognition on the part of industry that the conservation of natural resources is vital to the nation's economy and security.

"The role forests, soil, water, wildlife, outdoor recreation and related resources have in maintaining our standard of living and our democratic freedoms," he said, "should be clear-

ly understood in all fields of endeavor, as well as by all of our people. We have made great progress to this end—but we have not as yet attained the position where we need no longer fear for our basic wealth, our land resources. To this achievement, and in the shortest possible time, the present program of The American Forestry Association is dedicated."

The conference itself, in its closing hours, gave positive voice to the urgency of strengthening national economy and security by attacking waste and confusion in the conservation effort, particularly at the government level. By resolution (see page 30 for full resolutions) it called upon Congress to make effective the recommendations of the Hoover Commission (Commission on Organization of the Executive Branch of the Government); it urged the President to establish a non-partisan Board of Review in the Executive Office of the President to review and coordinate major natural resource development plans, particularly as related to water development; and it requested Congress to take no further action in the development of large river valley authorities until federal responsibility for planning and development be definitely defined and the constitutional rights of states and individuals be determined.

This problem of water supply, yearly growing more acute, and so vital not only to the economy and security of the nation, but to its very existence, was No. 1 on the conference agenda. In a session presided over by Samuel T. Dana, dean of the School of Forestry and Conservation, University of Michigan, and a vice-president of The American Forestry Association, distinguished speakers from the fields of science, government, industry and the public attacked the problem in its many ramifications with vigor and realism.

George A. Phillips, assistant to the Secretary of Agriculture, in reviewing the overall problem, described the supply situation as that of a pincers movement.

"On the one hand," he said, "we have a rapidly growing population

Dear Mr. Spurr:

My admiration for all that The American Forestry Association is doing for the security of our country through its fight for the preservation of our priceless natural resources was increased tenfold after having the pleasure of meeting so many of your distinguished members. It was a privilege to appear on such a fine program and an inspiration to be with people who are demonstrating such a keen realization of their duties as citizens.

Omar N. Bradley
Chairman, Joint Chiefs
of Staff

which demands a correspondingly greater volume of water to meet day-by-day needs plus added requirements of the conveniences and luxuries associated with a high standard of living. On the other, the spreading pollution of streams and lakes associated with an increasing population and expanding industrial development is reducing the volume of available usable water."

To illustrate, he pointed out that in 1800 only seventeen waterworks systems existed in this country. Today there are 14,000, providing water to about 85,000,000 people, or two thirds of our population, with many of the systems in need of expansion. Furthermore, there are 2,000,000 people in 5,700 communities still without public waterworks systems.

"In the eastern and middle western states," he declared, "the water supply problem is complicated by a progressive depletion of groundwater supplies because of overdraft of underground reserves and a marked increase in the pollution of surface sources of water by sewage and industrial wastes. In the West, land under irrigation has increased from 400,000 acres in 1860, to nearly 20,000,000, with an annual delivery of 60,000,000 acre-feet of water.

In the face of this situation, Mr. Phillips declared, we eventually may be compelled to reduce our per capita consumption of water. However, he believes it more logical to reduce the volume of polluting materials entering our waters. But more important, we must change our approach to the problem of water control and use.

"To date," he concluded, "we have approached the problem primarily as an engineering one. We have not sufficiently considered it as a social problem or as a land problem. We must come to understand that use and



A strip mine operation near Cadiz was the first stop on the Muskingum tour

management of land in accordance with its capabilities will result in more available waters, less fluctuation in streamflow, increased groundwater recharge and higher quality water. The watershed management concept, applied in its full sense, offers the most desirable medium for relating the interests of land, water and people."

The watershed concept, and particularly the part forests play in water conservation, was enlarged upon by E. N. Munns, in charge of forest influences for the U. S. Forest Service.

"The control of surface water at its source is essential to the ultimate solution of virtually all other water problems," Mr. Munns said.

Pointing to the great dams and other engineering works that "today are being sold to the American people as multiple purpose conservation projects," he declared that "without adequate conservation of the renewable resources, these works, great as they are, are doomed to eventual failure. They are doomed because without this conservation of the land resources, the reservoirs, the canals, the connecting works will be filled

with sedimentation long before their time. And, when the reservoirs are filled, we shall have great concrete slabs with their useless mud flats above them as a monument to the present generation."

There are two alternatives, Mr. Munns warned. We can let nature take its course and destroy these engineering works, or by applying the watershed concept, by bringing our land resources under proper management, we can slow down the natural processes and greatly lengthen the time the works are useful. If we follow the latter course, if we apply a strong, vital conservation program to the watersheds, the future can be assured.

How are we progressing in this direction? Concluded Mr. Munns, "The federal government today is spending less than \$25,000,000 on activities (excluding fire protection) related to the development of the natural vegetation of our land. Contrast this with the \$145,000,000 being spent by the federal government on the Colorado-Big Thompson project alone. Contrast this, too, with one estimate prepared last year indicating that plans

Everyone enjoyed the visit to Louis Bromfield's Malabar Farm. Here a group is gathered on the lawn

Photos by Howard J. Ward



available for water projects of the engineering type would call for a total expenditure of *fifty billion dollars*.

The valley authority approach to the West's water problems was attacked by former Governor Ralph Carr of Colorado, specialist in irrigation law. His searching analysis of this concept in resource management and development is presented in full on page 10 of this issue.

In essence, the distinguished conservationist told the conference that where the West is concerned, a valley authority changing the water setup on any given river so as to vest the title to its riverflow in a government corporation similar to the TVA would wreck existing economy.

Governor Carr believes that resource development should be carried out under existing laws by existing government agencies and bureaus, with local interests and the states participating.

—was presented by such eminent speakers as Governor James H. Duff of Pennsylvania, Congressman Robert T. Secrest of Ohio, F. A. Wirt, advertising manager of the J. I. Case Company of Racine, Wisconsin, Kent Leavitt, president of the National Association of Soil Conservation Districts, and Guy Irving Burch, director of the Population Reference Bureau.

Declaring that further delay in adopting a program for nationwide clean-up of our streams and freeing them from pollution will be fraught with the gravest consequences to the health and welfare of our people, Governor Duff (see page 16 for full statement) graphically described the water reclamation program now under way in Pennsylvania.

"With funds provided by the General Assembly," he said, "more than 26,000,000 tons of silt, culm and various other components of the pollution of the Schuylkill River will have been

gram of population education must accompany programs of natural resource conservation (see page 13 for full statement).

Mr. Leavitt outlined two basic steps which he considers necessary, without changing our form of government, to attain important conservation goals (see "The Challenge of Land Ownership" in *AMERICAN FORESTS* for September). First, is that we change our thinking about the ownership of land—that we consider ourselves trustees of the land, taking from it a fair profit during our occupancy, but leaving it for future generations in as good condition, if not better, than when we received it. Second, we must continue to develop—and more vigorously apply—the science of proper land use.

Congressman Secrest declared that no domestic problem exceeds that of soil conservation, and called for a full-fledged effort to check and con-

On the final day of the annual meeting, members stopped to inspect the Mohican State Forest in the Muskingum area



L. A. Danse, chairman, General Motors Industrial Waste Committee, told the conference that industry had awakened to its responsibility in water conservation and predicted more concerted action in the fight against waste and pollution.

What a state can achieve in pollution control and water reclamation when it really tackles the problem was one of the highlights of a special panel on "What are We Seeking in Conservation." With Edward A. Wayne, vice-president of the Federal Reserve Bank of Richmond, Virginia, serving as discussion leader, a wide range of approaches to a common goal—natural resource conservation

removed by the end of December of next year. It seems accurate to say that this, one of the greatest water reclamation projects in the world, proves beyond peradventure that the job of stream clean-up can be done."

The Governor further emphasized that the states should tackle their own conservation programs and not "push them on to Washington."

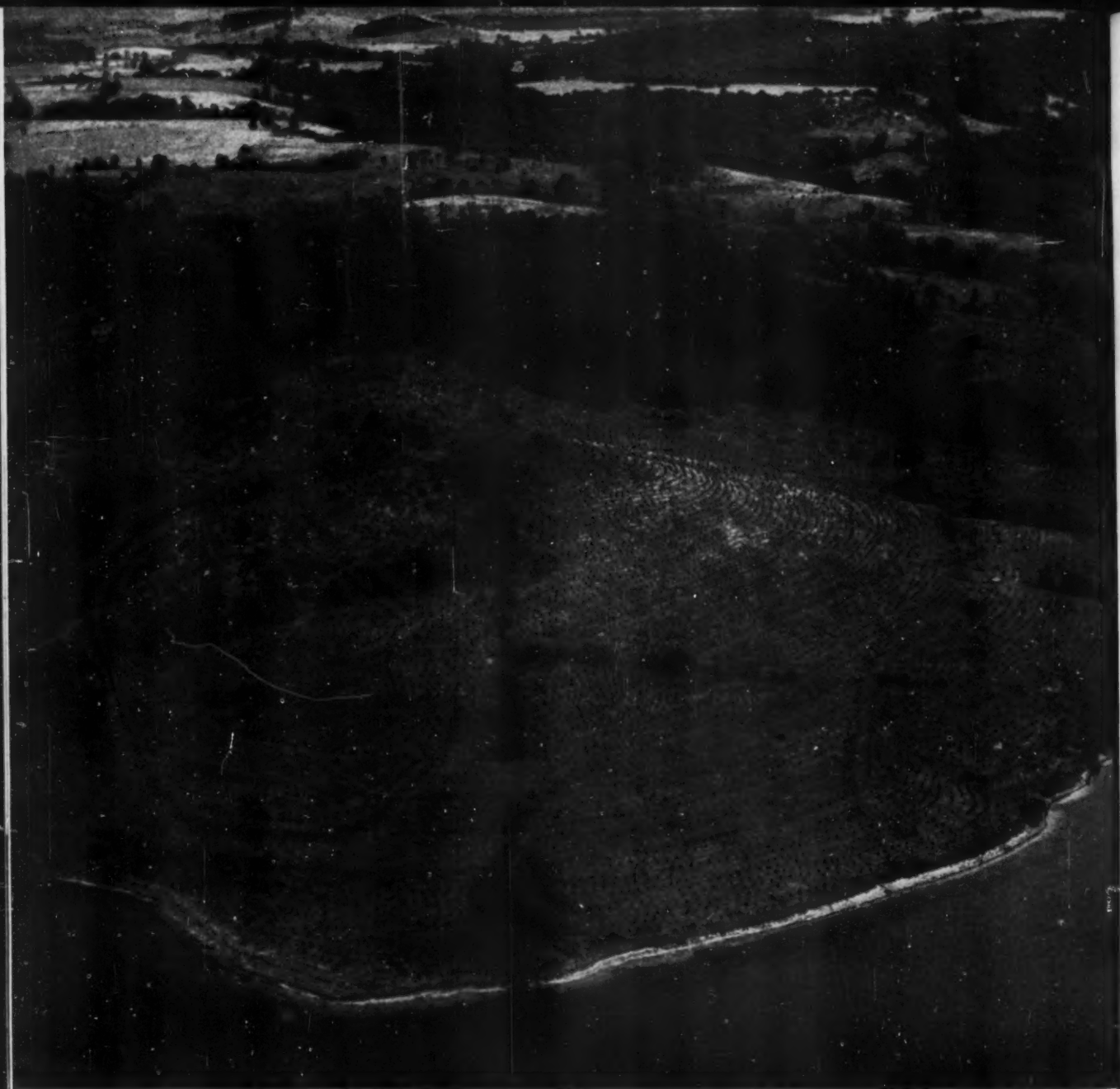
Mr. Wirt, presenting the point of view of the businessman, declared that business, for its own good, not only has the opportunity but also the responsibility to play a leading part in the conservation effort (see page 14 for his full statement).

Mr. Burch brought out that a pro-

trol the menace.

Leslie A. Miller, former governor of Wyoming, and chairman of the Committee on Natural Resources for the Hoover Commission, presented the case for a "Department of Natural Resources," declaring that, in his opinion, present-day conservation demands rate cabinet level recognition. (See page 24 for full statement.)

Field trips included a tour of Oglebay Park at Wheeling, the Muskingum Watershed Conservancy District, strip mining operations at Cadiz, the Mohican State Forest and Louis Bromfield's Malabar Farm, in Ohio.



Herrin F. Culver, SCS

Forests for Tomorrow—tree planting on Lake Leesville in the heart of the Muskingum Watershed Conservancy District

Muskingum Is Dedicated

The founders of our country would be pleased with the story of the Muskingum Watershed Conservancy District. Initiated and directed by Ohio people, it is pointing the way to a new and greater development of our native land

THE three hundred people who braved inclement weather to attend the dedication of Ohio's Muskingum Watershed Conservancy District on October 12, heard A. C. Spurr, president of The American Forestry Association, describe the 8,000-square mile soil and water project as a "classic example of dynamic democracy in action" and a "triumph for the American way of doing things."

Camp Muskingum on picturesque Leesville Lake, one of ten artificial lakes created in the District, was the setting for the dedication ceremonies where a sixteen by twenty-inch bronze tablet presented by The American Forestry Association was set in native stone to commemorate the event. The inscription on the tablet can be read below.

Addressing an audience composed of many Ohioans who backed this great experiment from its inception, and AFA members from all over the nation, President Spurr paid tribute to people "who were convinced they had the brains and the know-how to try something new in watershed development."

"Their project called for patient leadership, faith in the valley people and the pioneer's determination to overcome all obstacles," he said. "And at the hard core of their plan was a philosophy cherished by Americans, namely, that the solution of people's problems lies with the people themselves."

He then described the accomplishments of the project since it was

launched twenty-one years ago. These include a \$45,000,000 flood control project, a great tree planting project and, more recently, a \$600,000 recreation program proving of incalculable benefit to recreation-hungry Ohioans.

"In an era too often characterized by a tendency to discount the proven ability of small communities to work out their own problems, this Muskingum project stands out like a beacon pointing the way to a new and greater development of our native land," Mr. Spurr declared.

"Today, we have two schools of thought in regard to the development of our valleys all over America," the speaker continued. "One group wants us to leave things alone and promises that somehow things will turn out all right in the end. The other group preaches that the various communities will never make any real progress until federal authorities are established and given complete power to take on valley jobs single-handed."

"I do not agree with either of these schools of thought," Mr. Spurr said. "There is another way to achieve what we seek in valley development. That is the Muskingum way. The question today is no longer over the wisdom of watershed management. Its value in the conservation of resources is widely accepted. The question now is whether we shall participate in the management or be the object of it. Years ago the people in this valley decided they would participate in the development of their valley. And like their pioneer forefathers they have blazed a new trail founded on democratic principles."

"From the very first this project was an instrument of local government and the job was done the way valley people wanted it done. Today the success of the self efforts of these people is attested not alone by the changed aspect of their lands and the social and economic climate of the valley, but by the fact that visitors from all over the world come here to study and take a leaf from the plans and methods that were followed here."

◀ The dedication plaque

"What these visitors see fires their imaginations. To them the district represents a great hope—a key that provides the right degree of cooperation between communities and government agencies. Uneasy over the prospect of further liberty-sapping encroachment by big-government projects, visitors note that here the control is vested in the people and the government agencies cooperate, but do not dictate, in carrying out the district's plan."

"The work that has been done here represents a classic example of dynamic democracy in action. It is living proof of the progress that is attainable through the American processes of self-government."

In presenting the plaque to the District, Ohioans who have lived to see their once flood-swept valley transformed into a land of great promise heard Mr. Spurr intone, "In years to come, it is our devout hope that the children of the men and women who made this program a reality and their children's children will study the inscription on this plaque and take its lesson to heart. In the healthy atmosphere of this pleasant valley it is to be hoped they will rededicate themselves to the task of keeping this country strong. May they never waver from the principles on which our nation was founded."

Others who participated included Bryce C. Browning, secretary-treasurer of the District; George Archer, of Zanesville, a District pioneer; Newton Mansfield, chairman of the District Board of Directors, of Ashland; Judge Frank F. Cope, presiding judge of the conservancy court, of Carrollton; R. K. Brown, board member, of McConnellsville; A. W. Marion, director, Ohio Department of Natural Resources; H. A. Rider, chief, State Wildlife Division, of Ohio; Colonel D. T. Johnson, U. S. Corps of Engineers; Harry Pockras, chief engineering assistant of the District; T. J. Kennard, state conservationist for the Soil Conservation Service; and Ralph Musser, regional conservator for the SCS.

Regret was expressed that one of the key pioneers of the original Zanesville group, D. W. Armstrong, had to go to the hospital just prior to the ceremony.

THE MUSKINGUM WATERSHED
CONSERVANCY DISTRICT

IN THIS VALLEY HAS BEEN ACHIEVED A CLASSIC EXAMPLE OF COMMUNITY, STATE AND FEDERAL COOPERATION IN THE CONTROL OF FLOOD WATERS AND THE DEVELOPMENT OF NATURAL RESOURCES FOR THE PUBLIC BENEFIT. INITIATED AND DIRECTED BY OHIO PEOPLE, IT DEMONSTRATES THE PROGRESS THAT IS ATTAINABLE THROUGH THE AMERICAN PROCESSES OF SELF-GOVERNMENT.

DEDICATED BY
THE AMERICAN FORESTRY ASSOCIATION
OCTOBER 12, 1949



Howard J. Ward

A camera study of Leslie A. Miller before his talk at conference

The Case for a Department of Natural Resources

By LESLIE A. MILLER

ONE of the principal recommendations of the Natural Resources Task Force of the Hoover Commission (Commission on Organization of the Executive Branch of the Government) is to give cabinet level recognition to conservation. Under this plan, the Department of the Interior would cease to exist.

Or put another way, the union into a Department of Natural Resources

of a Water Development Service, a Forest and Range Service, a Fisheries Service, a Wildlife Service, the National Park Service, the General Land Office, the Geological Survey and the Bureau of Mines.

A consolidated Water Development Service would be established to administer the present functions of the Bureau of Reclamation, the river development functions of the Corps of

Engineers, the power marketing functions of the Bonneville and Southwestern Power administrations and of the Division of Power in the Department of the Interior, certain water-development functions now administered by the Federal Power Commission, and certain functions of the Department of State relating to international boundary streams. The committee recommends the retention of the Tennessee Valley Authority in its present form, but the establishment of additional valley authorities is opposed.

Establishment of a consolidated Forest and Range Service would be based upon the present Forest Service (now in the Department of Agriculture) and furthering its general policies, but would include the forest and range management functions of the Bureau of Land Management (now in the Department of the Interior) and the research functions of the Department of Agriculture relating to forest insects and forest diseases.

Regional decentralization of the Water Development Service and the Forest and Range Service, by river basins where practicable, is recommended to facilitate "grass roots" decisions, interservice cooperation and local participation in planning.

The present Fish and Wildlife Service would be divided into two units, a Fisheries Service and a Wildlife Service. This will make possible greater attention to the problems of commercial fisheries.

The General Land Office would be re-established as a record-keeping and title-holding agency for public lands.

To the Bureau of Mines would be transferred certain related activities from other federal agencies.

Furthermore, to the end that only economically feasible projects shall be instituted by the resource agencies and especially by the Water Development Service, the committee recommended the establishment in the Executive Office of the President of a Board of Coordination and Review with responsibility for reviewing and coordinating plans for each major project from the time it is first proposed; for making certain that only projects which are economically and socially justifiable are recommended for approval; and for assuring effective participation by all federal and state agencies concerned during the formative stage.

It might be added here that if only this last recommendation is carried out the contribution to the taxpayers of the country would be great.

Concerning our vital conservation problem, the Task Force had this to

say in its report to the Commission:

"The natural resources which our government manages or whose use it significantly influences are crucial in our nation's future. The committee believes that federal activities in this field must therefore be studied in the full light of the part which these resources play in our whole manner of life. Keen attention must be given also to the great drain placed upon these resources by earlier neglect of conservation, by our high standard of living, our increasing population, and our participation in two great world conflicts. Even though peaceful adjustments may still be hoped for, we live amid the anxieties of continued international tension. The committee would thus be false to its trust, if it were unmindful that a third world conflict may arise in which our national capacity to produce and sustain a prolonged military effort would once more put tremendous strain upon our great but nevertheless limited resource reserves.

"Entirely apart from the danger of another war, our country has reached a point in its development that calls for a new concept of the relation of natural resources to its economy. The time has definitely passed when the natural resources of the continent were so abundant in comparison with the demands upon them that wasteful and extravagant practices, either by private owners or by government agencies, could be tolerated. To meet the needs of the future and to promote more orderly development and exploitation of the nation's resources, as well as to guard the heritage of the people, the unification of the responsibilities and services of the government dealing with such matters seems clearly called for. By this means alone can the lack of coordination, and the present costly competition among federal agencies, be corrected.

"The fundamental purpose of a Department of Natural Resources should be to obtain the most complete and effective use of the waters, minerals, lands, forests, fisheries, and wildlife of the nation. While some of these resources have suffered from over or wasteful development, others have been denied their proper contribution to national well-being by underdevelopment. A department is urgently called for which will focus its effort, much more than was ever possible in the Department of Interior, on all its resource programs, so as to obtain the best and fullest resource use for the longest time for the whole nation.

"The case for a Department of Natural Resources is strong; in the

LESLIE A. MILLER, former governor of Wyoming and chairman of the Committee on Natural Resources for the Hoover Commission, is eminently qualified to speak on the case for a Department of Natural Resources.

opinion of the committee, it is decisive. No feasible alternative offers comparable advantages in common purpose, opportunities for coordination of related activities, economy of operation, flexibility, and above all, for clarification of policy. Whether considered from the viewpoint of the best location of activities dealing with the public domain, water development, soils, forest, range, recreation, fish and wildlife, power marketing, or mineral resource functions, a department combining these activities is the most satisfactory plan of organization.

"With respect to management of the public domain, the committee is aware of proposals to concentrate all activities dealing with organic resources in the Department of Agriculture. The committee recognizes the relationship of public domain management to agricultural policy. It believes, however, that advantages of combining forest and range, fish and wildlife, park and recreation, mineral, water resource and development functions, more than offset any advantages that might accrue from a combination of all functions relating to animals, trees, and soil improvement practices on public and private land in the Department of Agriculture. For one thing, the management of the public domain in all of its many aspects is inextricably bound up with the development of the great river basins in the area where the public domain lies. Moreover, the committee feels strongly that both agriculture as a way of life, and the trusteeship of our great natural resources under special conditions of governmental ownership or control should have separate representation at the top level.

"The case for a Department of Natural Resources is not that it would comprise one definite function or that it would bring together the whole set of related activities. Given the nature of the resources, no such neat arrangement is possible. The man-

agement of the public domain in general and the development of water resources are necessarily multiple-purpose operations. They defy any traditional functional classification. The public domain is concentrated in an area of the country in which water is scarce, and in which, therefore, water development looms as a major problem. There is also a heavy concentration of forest, range, and mineral resources in this area.

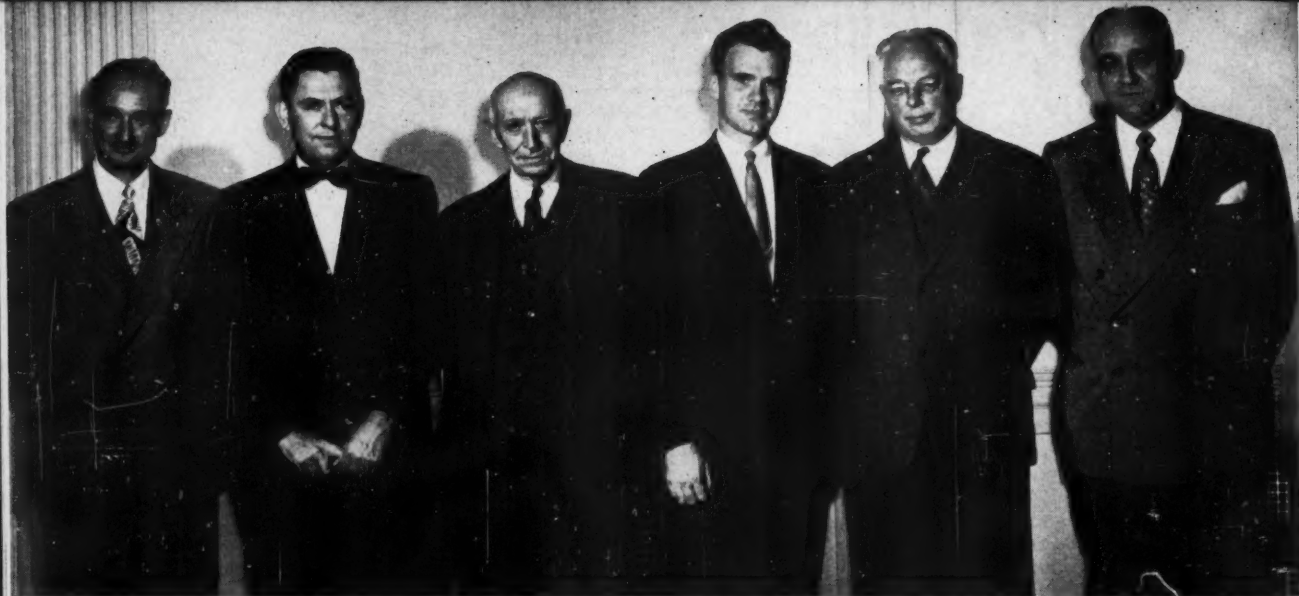
"Consequently, it seems the part of common sense to take advantage of these relationships and to put these functions in one department. Such a department could be organized into a relatively small number of agencies carefully tied together and—of the greatest importance for resource development—heavily decentralized on a regional or river-basin basis. Problems of coordination with other functional agencies would continually arise, but they would exist no matter what over-all departmental arrangement is provided. The point is that any splitting up of public domain, forest and range, water resource, and mineral resource functions would add more problems of interdepartmental coordination than it would eliminate."

It is not the view of the Natural Resources Committee that the proposed Natural Resources Department usurp soil and water conservation activity carried on by the Department of Agriculture in its services to farmers and ranchers. However, it is the intention that the national interest as well as the local interest be firmly represented in the conservation planning pertinent to range resources in the West.

The objective set forth for a reorganized Department of Agriculture by the Committee on Agricultural Activities is the development of programs which will: (1) safeguard our resources and amply provide our population with the agricultural commodities it requires at prices that will preserve for agriculture a sound position in our national economy; (2) provide assistance to farmers for purposes of achieving the best land-use adjustment consistent with the long-time interests of both producers and consumers.

Fair comparison of the above
(Turn to page 46)

The need for a Department of Natural Resources is strong and decisive in the opinion of Former Governor Miller who declares that no feasible alternative plan offers comparable advantages in common purpose, opportunities for coordination of related activities, economy of operation, flexibility, and above all, for clarification of policy



Howard J. Ward, Ohio Division of Forestry

Here are The American Forestry Association's Conservation Awards winners for 1949 with President A. C. Spurr. Left to right: Bryce C. Browning, Dover, Ohio; Dr. M. D. Mobley, Atlanta, Georgia; D. Clark Everest, Rothschild, Wisconsin; Thomas J. Page, New York City; President Spurr; and Walter R. Humphrey, Fort Worth, Texas. Missing is Dr. Hugh H. Bennett, chief of the United States Soil Conservation Service, who was in Europe.

For Service to Conservation

Six distinguished conservationists receive AFA awards

Taking formal recognition of the splendid and unselfish services rendered in the name of conservation by men in ever widening fields of endeavor, The American Forestry Association presented Conservation Awards for 1949 to six public-spirited Americans at its 68th Annual Meeting banquet in Akron, Ohio, on October 12.

Recipients were Dr. Hugh Hammond Bennett, chief of the United States Soil Conservation Service; Bryce C. Browning, secretary-treasurer of the Muskingum Watershed Conservancy District in Ohio; D. Clark Everest, president of the Marathon Corporation at Rothschild, Wisconsin; Walter R. Humphrey, editor of the *Fort Worth (Texas) Press*;

Dr. M. D. Mobley, director of vocational education for Georgia; and Thomas J. Page, agricultural director of Radio Station WNBC, New York City.

A. C. Spurr, Association president, made the presentations which included life membership certificates in The American Forestry Association and individual walnut plaques bearing the inscription: "In recognition of outstanding service in the conservation of American resources of land, water and forests." He also stated the Association's intentions of making similar awards at each succeeding annual banquet to leaders in various fields.

Dr. Bennett, unable to attend because of a trip to Europe, was cited as a truly outstanding conservationist in the field of public service. He is internationally recognized as a soil conservation authority and is often called "the father of modern scientific soil conservation." He has devoted his life to the study of land, agriculture and soil erosion problems, and his writings on these subjects are



Sam Stites (right), head of Akron's Chamber of Commerce, admires D. C. Everest's plaque

widely quoted. Among the many honors he has received is the Distinguished Service Medal of the Department of Agriculture, awarded in 1947.

Also named from the field of public service was Bryce C. Browning, who worked so diligently to help develop the Muskingum Watershed Conservancy District which Association members inspected during the Ohio portion of the annual meeting. His leadership in forestry and conservation is especially well known to members of The American Forestry Association since he served on the Board of Directors from 1943 to 1947. He is currently an officer and member of the Board of Governors of the Ohio Forestry Association, and he has served continuously as a member of the Board of Friends of the Land

sion. As a director of the Masonite Corporation he encouraged an ambitious forestry program, and he has a sound sustained yield program on his own corporation's lands.

He is chairman of the Forest Industries Council, which at the moment is actively engaged in an analysis of federal, state and private programs directed to the control of insects and disease infestations.

Conservation Award winner in the field of news was Walter R. Humphrey, nationally known editor of the *Fort Worth Press*. Recently cited by a Texas magazine as one of its "Men of the Month," he was called "Mr. Soil Conservation of Texas." He first became interested in soil conservation as a "story" in the 1930's, and now he is recognized as a pioneer of soil and water conservation in the South-

east. He has consistently brought to his listeners well planned programs on forestry and other land use. His outstanding achievements in his field have brought him recognition from his fellow agricultural broadcasters throughout the nation. His programs have an authentic touch, for he is an enthusiastic follower of his own advice on conservation practices. Possessor of a degree in chemistry, he even conducts forestry research.

Recognizing the role of radio in conservation, one of the 1949 awards went to Thomas J. Page, agricultural director of Station WNBC, New York



Aaron Beacon Journal

Bryce C. Browning, hard working secretary-treasurer of the Muskingum Watershed Conservancy District, rises to accept his Conservation Award from Association President A. C. Spurr at the annual meeting banquet

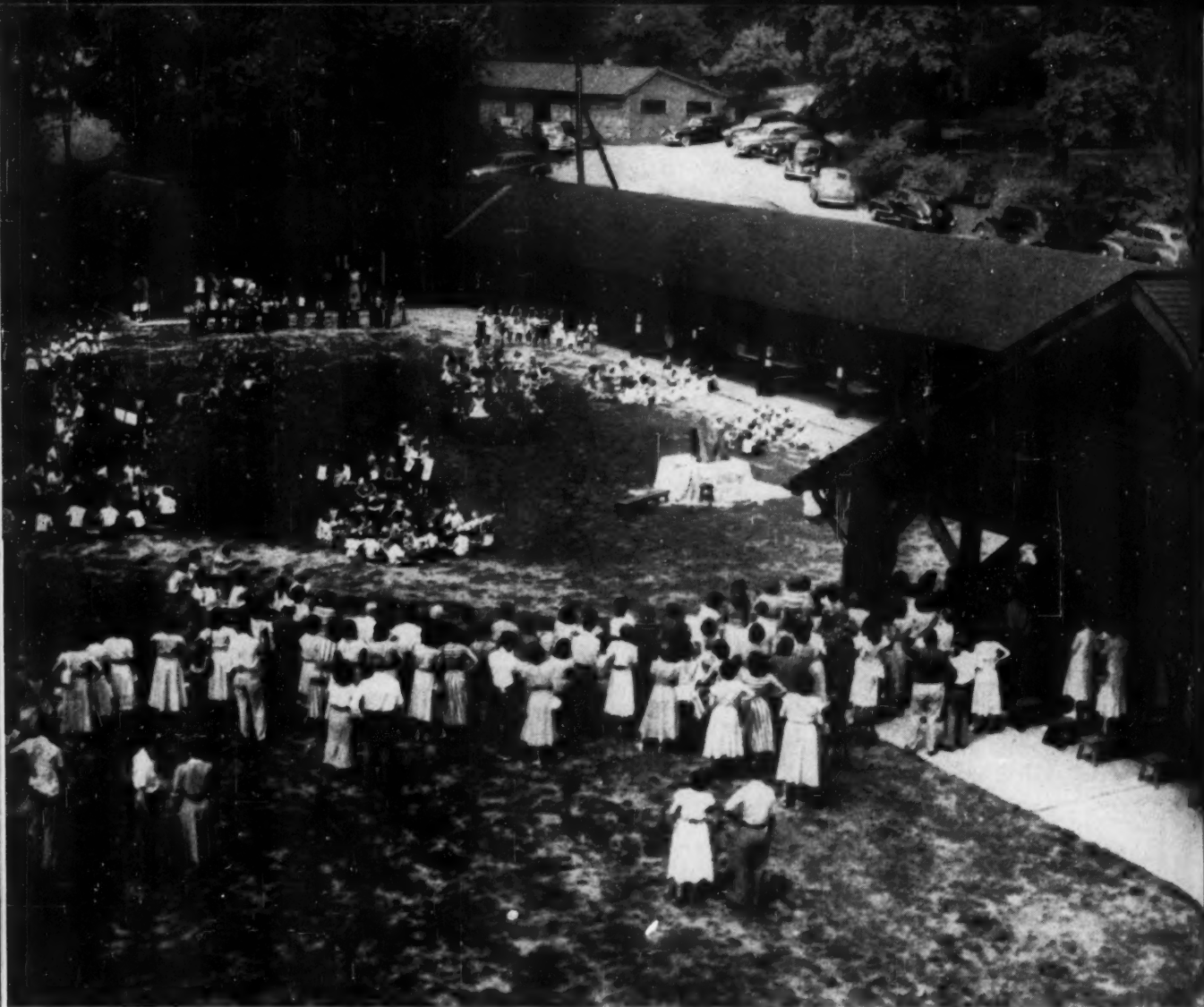
since its founding.

Selected as a true champion of conservation within the field of industrial forestry was D. Clark Everest, president of the Marathon Corporation, Rothschild, Wisconsin. An active supporter of the U. S. Forest Service, he encouraged the establishment of national forests in the Lake States area. He also backed the Forest Products Laboratory in establishing its pulp and paper research divi-

west. His editorials have been quoted in this and Latin American countries, and his influence in conservation affairs has been of a national scope. In 1946 he launched the nationally famous "Save the soil and save Texas" soil conservation awards program for the *Fort Worth Press*, prizes for which now total \$13,000 annually.

Because of his work in the state of Georgia, Dr. M. D. Mobley of Atlanta was selected as the field of edu-

City. He has consistently brought to his listeners well planned programs on forestry and other land use. His outstanding achievements in his field have brought him recognition from his fellow agricultural broadcasters throughout the nation. His programs have an authentic touch, for he is an enthusiastic follower of his own advice on conservation practices. Possessor of a degree in chemistry, he even conducts forestry research.



Programs for youngsters from four to fourteen are planned at Children's Center by Oglebay Institute

OGLEBAY—People's Park

Wealth of park facilities, plus recreational and cultural activities, impress AFA visitors to Wheeling, West Virginia

BEAUTIFUL Oglebay Park—recreational and cultural center which is the pride of Wheeling, West Virginia—provided an inspirational setting for the opening two days of the 68th Annual Meeting of The American Forestry Association October 10 and 11. The wealth of park facilities, together with activities promoted through the Oglebay Institute, were proof to assembled members that people can work together to promote a richer commu-

nity life for all age groups.

Located five miles from the city, the park is widely known for the thought and planning which has gone into its development. Within its more than 750 acres are hiking trails, bridle paths and stables, an eighteen-hole golf course, tennis courts, swimming pool, playgrounds for youngsters, dancing pavilion, winter sport areas and many other conveniences—of a quality and quantity found in few parks. All is administered by the

Wheeling Park Commission, under the direction of Homer Fish and the commission has other developments and improvements either under way or on the planning boards.

The extensively developed cultural and educational activities, integral features of the park, are principally in the hands of a unique organization incorporated as Oglebay Institute. Financed from dues, special gifts and endowments, and aided by the Agricultural Extension Service of West

Virginia University, the Institute arranges such varied programs as nature study, drama, music, arts and crafts and religious activities. A special Institute program was presented for Association members the first evening of the meeting.

While the Association's meeting activities were centered in the Pine-room at Crispin Center, members had an opportunity to investigate the background and some of the unusual features of the park. They learned that the tract was willed the city in 1926 at the death of the late Earl W. Oglebay, Wheeling industrialist, who stipulated that it be used for public education and recreation. At that time it was known as Waddington Farm, an agricultural showplace devoted to pioneering in modern soil practices.

Evidence that this is a people's park is seen in such other cooperative undertakings as the Wheeling Garden Center, the Wheeling Symphony Society and the "63" Club, which six boys and three girls founded so they could raise money to buy a heating plant for the lodge in which they wished to hold dances during the winter.

Then there is the highly commended caddy camp plan. The park golf course being five miles from Wheeling, thinking citizens of the community realized that boys hitchhiking back and forth to caddy were subjected to undue risks. They also noted the boys weren't getting proper meals and had idle hours between golf rounds in which they were get-

The tower at Oglebay Park



Folk dancers in costume for a program sponsored by the Institute



Oglebay offers art classes as part of its varied cultural program

ting into trouble. They remedied this situation by organizing a caddy camp which accommodates forty-five boys for the summer.

These boys spend the summer at the camp. They are served wholesome meals, are given definite duties about the camp and take part in athletics, crafts and positive instruction in caddying. The money they earn is turned over to the caddymaster to be banked. The amount saved over and above the cost of room and lodging is given the boy at the end of the summer.

Especially points of interest for members included a visit to the historic Mansion House, built in 1835, and furnished today as a museum depicting the way of life during that period, and the Frontier Travel Gallery located in an old red brick carriage house built about 1845. The Gallery presents a romantic panorama of early travel days, including inland navigation and overland transportation as it was on the National Road, Route 40.

Many also inspected the Oglebay Arboretum now being developed, the Day Camp for children from the ages of four to fourteen, and Camp Russel. The latter offers facilities for organized youth groups up to 300 persons, has rustic type bunk houses, central wash houses and a log cabin lodge for meals. During the summer such activities as the YMCA Camp for Boys, County 4-H Camps, Drum Major and Band Camp, Choral Music Training Camp, Junior Nature School and so forth are scheduled at Camp Russel.

Plans for new developments and improvements were also unfolded for the visitors. Of especial interest was the new lodge now under construction on Telescope Hill as well as the new horse stables and riding ring also nearing completion. The lodge is being built to accommodate the larger activity groups for both meetings and banquets, while the interest engendered by the Oglebay Park Saddle Club's horse shows made the original stable facilities too crowded.

Resolutions Adopted At 68th Annual Meeting

WHEREAS, Congress clearly recognized the necessity for government reorganization when it unanimously created the bipartisan Commission on Organization of the Executive Branch of the Government in July, 1947, and

WHEREAS, Chairman Herbert Hoover and the members of the Commission admirably and efficiently performed their duties of investigation and made specific recommendations concerning:—

(1) The elimination of expenditures to the lowest amount consistent with the efficient performance. The elimination of duplications and overlappings, and the consolidation of such services, activities and functions of a similar nature.

(2) The elimination of services, activities and functions unnecessary to efficient government.

(3) Definition and limitation of executive functions, services and activities, and

WHEREAS, Thoughtful, public-spirited men and women throughout the United States favor a thoroughgoing reorganization of our Government's activities in the field of Natural Resources, and

WHEREAS, The Commission's report promises lasting benefit to all citizens not only in terms of economy and efficiency but also in terms of the effective use of our material resources in the cause of world peace and progress, and

WHEREAS, An educational program to acquaint the public with the findings of the Commission Report and to stimulate the interest of all citizens in continuous participation in the affairs of government on a bipartisan, voluntary basis has been undertaken by the Citizens Committee for the Hoover Report. Therefore, be it

RESOLVED, That The American Forestry Association, at its 68th annual meeting in West Virginia and Ohio in October, urges the Congress to make effective the recommendations of the Commission by enacting appropriate legislation;

That cooperation be given to the educational program of the Citizens Committee for Reorganization of the Executive Branch of the Government.

WHEREAS, The Hoover Commission on the Reorganization of the Executive Branch of the Federal Gov-

ernment recommends that further appropriations by Congress for use in development of large river basins, including flood control be contingent upon a thorough study and analysis of the proposal in view of costs, worth and permanency,

WHEREAS, The present endeavors of the Reclamation Service of the U. S. Department of Interior, the Army Corps of Engineers and other federal activities are independently organized, at least in part conflicting,

WHEREAS, Many bills are proposed in Congress toward the establishment of river valley authorities, involving the constitutional rights of states and individuals.

THEREFORE BE IT RESOLVED That The American Forestry Association request Congress to take no further action in the development of large river valley authorities until federal responsibility for planning and development be definitely defined and the constitutional rights of states and individuals be determined.

BE IT RESOLVED That The American Forestry Association, vigorously endorse the recommendation of the Natural Resources Committee of the Hoover Commission that a nonpartisan Board of Review be established in the Executive Office of the President to review and coordinate major natural resources development plans, particularly as related to water development, and call to the attention of the President the urgent need for a board of this character so that the people of the country may benefit by an authoritative and impartial analysis of the economic and social justification of future resource development.

BE IT RESOLVED That The American Forestry Association, commend the progress being made by states and the forest industries in achieving important forestry goals, and reaffirm their belief that improved forest management in this country must stem mainly from the initiative of enlightened private ownership; that the states must accept greater responsibility for dealing with their own forest conditions and needs, including timber harvesting controls adequate to maintain all forest lands in production; and that the federal

government must exercise vigorous leadership through the wise handling of federal lands and increased activity in the fields of education and co-operation.

BE IT RESOLVED That The American Forestry Association vigorously oppose the Lemke Bill (H. R. 4424) to open the national forests of Alaska to timber homesteading by war veterans; it views this proposal as a direct threat not only to this nation's last great backlog of virgin timber, but to its whole structure of public land use and management.

WHEREAS, The National Park System embracing the supreme examples of our country's scenery and the most significant sites of our history and prehistory, deserves the fullest protection against misuse and against all efforts to subvert its resources to any commercial use which cannot be justified by the most urgent national necessity, and

WHEREAS, The appropriations of the National Park Service of recent years have been insufficient to provide adequate protection for these properties, or to furnish the services to the public which it is entitled to expect, and

WHEREAS, there is constant effort to obtain legislation which would permit mining, grazing, logging, water impoundments and other commercial uses of park resources for immediate profit but to the detriment of the national interest, present and future;

THEREFORE, BE IT RESOLVED That The American Forestry Association urge upon the President, the Bureau of the Budget and the Congress that there be provided more adequate appropriation for the protection and necessary development of the National Park System and for essential services to the public; and that they record their firm opposition to all attempts toward the impairment of any part of the system which are not dictated by the national interest and by the general necessity of the nation.

BE IT RESOLVED That The American Forestry Association commend highly the example of coordinated federal, state, local and industrial action in the development of the Muskingum Conservancy District.

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Tribute to A Crusader

U. S. Forest Service and the Society of American Foresters honor the man who blazed the trail for American conservation in dedicating the Gifford Pinchot National Forest

AN address by Cornelia Brice Pinchot in which she called upon the entire nation to carry on the work to which her husband devoted his entire life, highlighted the dedication on October 15 of the new Gifford Pinchot National Forest (formerly the Columbia National Forest) in Washington. An audience of over 300 attended the ceremony sponsored jointly by the U. S. Forest Service and the Society of American Foresters.

In addresses lauding the pioneer conservationist, Governor Arthur B. Langlie, of Washington, stressed Mr. Pinchot's great work as governor of Pennsylvania. Clyde S. Martin, president of the Society of American Foresters, stated that Mr. Pinchot's far-sight and drive made possible the creation of the forestry profession in the United States. Lyle F. Watts, Forest Service Chief, enlarged upon the progress which has been made in for-

estry, much of it due to Mr. Pinchot's yeoman efforts, but warned that in the face of a growing population our natural resources continue to decline.

In her forthright address, Mrs. Pinchot declared that conservation, to her husband, was not "a vague, fuzzy aspiration — it was something concrete, exact, dynamic; the application of science and technology to our material economy for the purpose of enhancing and elevating the life of the individual—the very stuff of which democracy is made.

"To Pinchot, man himself is a natural resource," Mrs. Pinchot declared. "Believing as he did that the planned and orderly development of the earth and all it contains is indispensable to the human race, conservation in its widest sense became to him one of the guiding principles through which such prosperity might be achieved."

After describing how Gifford Pin-

chot became convinced that what was needed was an international policy in which all nations must eventually co-operate for their fullest development, Mrs. Pinchot scored the Conservation and Scientific Conference of the United Nations held at Lake Success "because the moral and humanistic, the economic and political objectives of conservation, as well as its democratic significance were rigidly ignored. . . . All mention of peace and war in relation to conservation was deliberately and definitely excluded from the agenda. The sterile little mouse that emerged, while excellent on the technical side and adequate enough on much of the scientific, had no right to lay claim to the name of Conservation in which it was conceived."

In an inspirational setting of incomparable beauty — including vast forest areas, jewel-like lakes, swift streams and Mount St. Helens, Mount

Most interested spectators when President Truman signed the proclamation naming the new Pinchot forest were six-year-old Gifford Pinchot and Dr. G. B. Pinchot, son and grandson, of the great forester, who were given the proclamation pen

Wide World Photos, Inc.





Leland J. Prater, USFS

The Gifford Pinchot National Forest in Washington (Mt. Adams in the background)—1,263,000 acres of public forest wealth dedicated "to the greatest good for the greatest number in the long run"

Adams (see picture this page) the audience at the La Wis Wis forest camp watched the unveiling of a bronze plaque that reads:

By Proclamation Of
**THE PRESIDENT OF THE
UNITED STATES**

This Forest Is Named
**THE GIFFORD PINCHOT
NATIONAL FOREST**

Dedicated To
"The Greatest Good Of The
Greatest Number In The
Long Run"

On October 15, 1949, members of the Society of American Foresters and of the United States Department of Agriculture Forest Service met here in tribute to the memory of Gifford Pinchot, foremost Forester, Conser-

vationist and World Citizen, co-founder of the Society of American Foresters, first Chief of the Forest Service

Society of American Foresters
Clyde S. Martin, President
U. S. Department of Agriculture,
Forest Service
Charles F. Brannan, Secretary
of Agriculture
Lyle F. Watts, Chief of the
Forest Service

When Regional Forester H. J. Andrews, master of ceremonies, asked those to stand who had served under Gifford Pinchot, almost a dozen of the "Old Guard" responded. One of these was William B. Greeley, a director of The American Forestry Association, who came up from the ranks to serve as the third chief of the Forest Service.

Among the notables present, the one who traveled the longest distance was Lady Listowel, an intimate friend and relative of Mrs. Pinchot and mother of Lord Listowel, Minister of State for Colonies in the British Cabinet.

Even those who were familiar with northwestern forests marvelled at the gigantic Douglasfirs and western red cedars which towered over the community kitchen and other rustic man-made structures in the La Wis Wis forest camp. The plaque commemorating the dedication was mounted on a large rock at the base of two huge Douglasfirs.

The location was fitting. It typified the virgin forests of the West which Gifford Pinchot worked so hard and valiantly to save from reckless exploitation.

The West's 3-Way Water Problem

(From page 12)

ter. Since the character of any project, be it an irrigation ditch with a capacity of two second-feet or a million acre-foot reservoir, is dependent upon the permanence of its right to use water, the title, derived either from a court decree or the certification of a state official, came to be considered as an estate in property as sound as the title to the lands under patent from the government upon which that water is used.

The entire economy which has grown up since the first diversion of water is founded upon the ownership by thousands of individuals or separate water rights which were instituted, constructed and carried to final decree by the men who won the West. When the number of individual titles to water in a single state is multiplied by the seventeen states which make up the semiarid region, it is easily understandable what result would follow the establishment of Authorities throughout the West. If the Congress in its wisdom determines that a Valley Authority shall change the water setup on any given river so as to vest the title to its riverflow in a government corporation similar to the TVA, then a new economy must be developed because the existing one will have been completely wrecked.

Under the plan presented by Authority bills which have been introduced into the Congress and which are now pending, the farmer will lose his rights to water because the Authority must possess and control the riverflow if it is to function and carry out the purposes of the legislation under which it will be established. Then it will become necessary for the individual to repurchase water from the Authority. That board will have the power to decide how much, at what time and under what conditions irrigation water may be applied to land. When it bars every other government agency from the area it will control the life and the future of every man and woman within its jurisdiction. If this is still America I am at a loss to understand it.

It is confusing to a person in the industrial East to be told that in many large areas of the West irrigation is the important function of a riverflow. Hydro-electric power, which has come to be the life blood of industrial centers, loses its importance in regions where only two or three persons are counted to the square mile. Closely associated with irrigation are the interests of the lumber, livestock rais-

ing and mineral industries. Since state constitutions classify priorities to the use of water in order as domestic, agricultural and manufacturing, any readjustment giving priority to hydro-electric power production will be suicidal. This does not oppose the production of any quantity of cheap hydro-electric power whenever possible and wherever a market justifies it. Be it said also that any irrigation dam can be used for the production of hydro-electric power without losing any of the values of water for its various other uses. In the early days of the settlement

Standing Invitation

AFA members at the 68th Annual Meeting who expressed regret there was insufficient time to inspect the entire Muskingum Watershed Conservancy District, will be pleased to know they have a standing invitation from Bryce C. Browning, District secretary-treasurer, to visit the project at any time.

"Just give us ten days' warning," Mr. Browning said in issuing the invitation, "and we will be glad to arrange trips for any interested parties over the entire area. While we were most glad to welcome AFA members in October, the truth is these visitors got only a glimpse of the project. We hope they will come back again and get the entire picture."

of the West, Congress, by a series of laws, which have been constantly interpreted by the Supreme Court and inferior federal tribunals, hold that the waters of western streams are subject to state control. In an important decision by Mr. Justice Sutherland it was announced that if it had not been done prior to the passage of the Desert Land Act, certainly in that law Congress dedicated the waters of western rivers to the plenary control of the states and made them *publici juris*.

In the second decision on the Arkansas River, where the states of Colorado and Kansas were the contending parties, the Attorney General of the United States claimed that the Reclamation Bureau possessed the right to administer and control the Arkansas. Mr. Justice Brewer, in a decision which has been the guiding star of interstate controversies since 1907, denied the claim of the Attor-

ney General and held that each of the states bordering on an interstate stream exercises an equitable sovereignty over a portion of the stream. Later, Mr. Justice Holmes held that no particular formula was essential in determining the rights of contending states to the riverflow of such a stream and said that in each case its peculiar facts would determine the allocation without quibbling over formulas.

Since that time the Supreme Court has announced that when each state's quota has been determined, either by compact or by a decree of the Supreme Court in an original suit, the rights to claimants within each state are determined according to the law's customs and usages of the state itself, and even the Supreme Court has no jurisdiction to determine the relative rights to water between citizens of the same state. With this controlling law as a guide, the states have established comprehensive laws for the distribution of water which have defined and limited the rights of all while protecting and preserving every individual's claims.

Under the bills which have been introduced and which are now pending in the Congress for the establishment of Authorities and the Administration on the Columbia River, this power of the states to control and regulate the distribution of riverflows is denied. The certain effect of such a revolutionary act can only be guessed.

The state has been regarded as occupying a position of *locus parentae* with respect to its citizens. An Authority which would deny to the state this power which was reserved when a national government of delegated powers was established cannot be successfully attacked without the disruption of the present governmental setup.

The needs of the people of the United States in its many sections, are as different in their nature as the climate, the soil, and the topography of the various sections. No national formula or law can meet the needs of all river basins.

At the present time all of the emphasis is being laid upon the passage of the Columbia Valley Authority Bill. A similar bill, providing for the Missouri Valley Authority has become of secondary importance for the moment. The people of the latter valley may draw little comfort from this temporary respite, however, because, in the event of the successful outcome

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of the congressional conflict over the CVA, the Missouri and all other river basins will receive immediate consideration. The certain results can be easily prophesied.

The entire answer to the contention of those who favor Authorities was contained in the report of the Committee on Commerce of the Senate after many weeks of hearings on a proposed Missouri Valley Authority Bill. There it was suggested that the Congress should not be asked to surrender its powers in the selection of projects and the determination of the amounts of congressional appropriations which should be spent.

It must be remembered that the proposed three-man boards intend to determine what projects shall be commenced and the money which will be used thereon. Hearings have been conducted at Washington on the CVA in recent months and upon the adjournment of Congress it is planned to go into the Northwest to hear evidence on the subject.

The projects mentioned heretofore were constructed without benefit of Authorities and refute the claim that river development is possible only under the TVA formula. On the Colorado, the seven bordering states allocated the riverflow by a compact, falling water being sold under procedure set up by the states themselves, the government's investment is being repaid and on the Western Coast industrial power is being sold at lower prices than the TVA standards. On the Big Thompson project in Colorado no Authority was needed to develop great quantities of hydro-electric power and furnish supplemental irrigation water for a vast area. In fact, the TVA is the only Valley Authority which has ever been approved.

The second of the major problems which confront the West at the moment stems from a determination by one of the signatory states to the Colorado River compact to secure an interpretation different from that which has been generally accepted since the compact was executed a quarter of a century ago.

By its terms the treaty divided the seven states bordering the Colorado River into two sections, the Upper and Lower Colorado River Basins. The Upper states are Colorado, New Mexico, Wyoming and Utah with a small corner of Arizona which is watered from the upper stream. The Lower Basin includes the remainder of Arizona, California and Nevada.

Roughly, each basin was allocated 7,500,000 acre-feet of water annually. The Upper States must either permit that amount to flow downstream each

year or else stagger the amounts over any ten-year period so as to accomplish the delivery of 75,000,000 acre-feet in any such decade.

Recently, the amount allocated to each of the Upper States was settled by a compact, confirmed by the legislatures of the participating states, consented to by the Congress and signed by the President.

California is dissatisfied. And when that state is unhappy the world becomes aware of the situation immediately. It is charged by the Native Sons that the confirmation of the Treaty with Mexico which gave to the lower republic certain rights to water out of the Colorado River and the Rio Grande constituted a surrender by all the states which did not oppose the treaty of sufficient of their rights to make up the allotment to Mexico. Otherwise, says California, it bears the burden for all.

Since a date in the early thirties California has enjoyed the use of some 900,000 acre-feet of water beyond the amount which the other states concede was allocated under the compact. She also is quarreling with Arizona over water proposed to be taken for an important project. Today California adds to her interpretation of the treaty, the assertion that she has used this water while the other states lost their rights by their very failure to use it.

An interesting answer is found in the suggestion that the underlying reason for a compact was the need for a definition of the rights of all the states, at a time when it was known and conceded that California was sufficiently populated and possessed of the funds with which to take and to apply to a beneficial use practically the entire flow of the river. The compact was intended, say California's opponents, to save to each of the others in the sisterhood, a fair and equitable share of the riverflow with the knowledge that in most cases the actual use of the water might be delayed for years.

One sidelight on the California unrest involves an effort to induce the Congress to adopt a resolution instructing the Attorney General to go into the Supreme Court and sue for a judicial determination of the rights of the several states. This, in spite of the fact that such determination has been accomplished by another legal method.

It should be remembered that the compact is the joint action of the executive and legislative branches of the government. The courts had nothing to do with its execution. If the executive branch were to follow the dic-

tates of the legislative branch now and go into court for a reallocation of the water there is grave danger that the two might be held to have abrogated the compact and turned the whole matter over to the court anew for determination.

As has been suggested in the past, the states and not the federal government have been held to possess the power to distribute and administer riverflows in the semiarid West.

The Supreme Court has repeatedly announced this doctrine and other decisions have held that the real party in interest under a reclamation project is the water user. The interest of the government is akin to that of an investor who advances funds for the construction of a project and is entitled to repayment for the funds advanced.

A great project is nearing completion in Colorado in which the Reclamation Bureau has already invested \$140,000,000. Provision for repayment of all reimbursable items are contained in the plans.

Now the government contends that its right to water must be adjudicated in a federal court and all other water users must be called before that tribunal. Since water was first diverted in the West, the state courts have adjudicated all such claims and the government, itself, has frequently appeared in water adjudication cases asserting rights under state laws the same as individual water users.

The litigation is developing under protests from individuals and corporations which assert that the United States is not the real party in interest and therefore should not oust the state courts of jurisdiction. This, they contend, will render state laws inoperative to the injury of all water users. A new issue over national and state laws, usages and customs is on the make, which every student of river problems will study with interest.

Rain still falls on the hightops of the West and snows cling to the mountain sides through the winter until the spring thaws come to release water to course down through every rivulet and creek. But the question of who shall distribute and administer those flows in the future offers a serious difficulty.

Possibly within the next year a part of these problems will be answered. If this paper appears at times to be colored by partisan views, may that misconduct be overlooked for the reason that Americans still claim the right to speak their views and to offer conclusions from their own little cabins in the hills.

Business

(From page 15)

or is blown into the next county, or when it is useless because of lack of water, business suffers in proportion to that loss.

Conservation practices, such as terracing, strip cropping, contour farming, proper rotation, grassland agriculture, grassed waterways, and other approved methods are being adopted—but not fast enough. Hundreds of thousands, if not millions, of acres are still to be farmed according to proven, desirable and profitable practices.

Farmers are still losing soil fertility by not following a wise land use policy suitable to their farms. The result, of course, is smaller income for individual farmers, and business suffers. Here again, business has a great opportunity to promote conservation of renewable natural resources.

But so far we have discussed only farm income. What about the income of the other eighty percent of our population? Or should we simply refer to total national income which usually bears a relationship to farm income of seven to one?

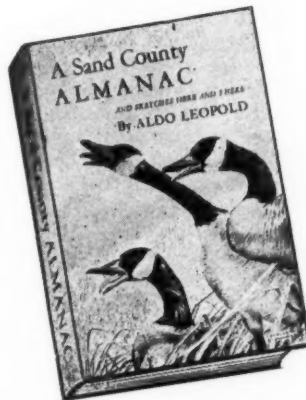
The fact is that the nation cannot prosper for long if agriculture is not prosperous. Most of us know from first-hand and bitter experience that business can dry up rapidly with a substantial decline in farm income. Yet soil, our greatest asset, is deteriorating on too many farms because of the lack of satisfactory soil conservation practices.

The farmer is a customer in direct proportion to the producing capabilities of the land, and with national income seven times that of farm income, business has a great opportunity to obtain a larger number of customers from farm and city through conservation of soil, water and forests.

Now for another factor, the men and women business employees. In a large percentage of labor-management disputes and difficulties, cost of living is given as a very important factor justifying increased wages. Because of the heat discussion of this subject generally it should be brought out that food costs represent only nineteen to twenty-one percent of the average annual disposable income. In other countries food costs may range from thirty-five to ninety percent.

The significant fact stands out that Americans spend on the average around twenty percent of their income for food, and consequently have left eighty percent for expenditures covering clothing, shelter, education,

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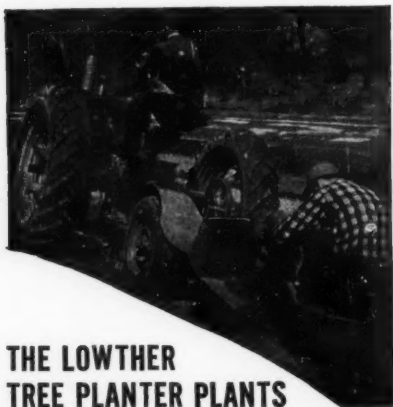
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transportation, recreation, entertainment—all the things which make up business.

Imagine what would happen if the cost of food should rise to fifty percent of the average income. Business, as we know it today, would be paralyzed.

Does it not follow that business is very much interested in the land which produces most of our food, feed and fiber? Shouldn't businessmen be concerned with the fertility of our soil, its productive capacity?

Business must contend with absenteeism, inattention to the job, cranky dispositions and sickness. Much of this, in my opinion, is due to a faulty diet from lack of essential elements in the food we eat.

Various facts which are known about soil and human nutrition today are not well disseminated. Some of the information, no doubt, is misleading, although unintentionally so. One great difficulty is the lack of facilities for making inexpensive spectroscopic tests of our soils. It is obvious, however, that we cannot grow as nutritious food on worn-out acres as we can on rich, fertile soil containing the major and minor elements essential to the health and well-being of crops, livestock, and people.

What is happening to our soil? What about the loss of fertilizer and plant food by water and wind erosion? An estimated annual cost by erosion of farm land amounts to the staggering figure of three billion tons of soil material containing available and potential plant nutrients worth \$3,000,000,000. When losing that

much soil we lose the equivalent of some 93,000,000 tons of the five principal elements of plant food—phosphorus, potassium, nitrogen, calcium and magnesium. Erosion removes from the land twenty-one times as much plant food as the crops do.

From the standpoint of employees' productivity, business should be interested in the food they eat—where it comes from and what it contains.

Stockholders play an exceedingly important part in the success of business. They furnish the money, sometimes as much as \$7,000 to \$9,000 per employee. According to a recent study, private investment by stockholders gives fourteen times the employment of government-invested dollars.

For very good reasons, stockholders want the business in which they invest to prosper, but business cannot prosper unless materials are forthcoming in quantity, customers are plentiful and employees productive. All of these in turn depend eventually upon conservation of soil, water and timber.

Of the four factors—customers, employees, stockholders and management—the latter has by far the greatest responsibility when it comes to business taking advantage of its opportunity in conservation.

Management, of course, is responsible for so conducting business that it serves its customers at a profit. Unless management wins sufficient votes in the market place, at a profit, their business fails. Employees in the selling end of the business are likely to

(Turn to page 45)

STATE FORESTERS ELECT OFFICERS



New officers of the Association of State Foresters, left to right: George White, Missouri, executive committee; Joseph Kaylor, Maryland, president; DeWitt Nelson, California, vice-president; Huxley Coulter, Florida, secretary-treasurer; and Stanley G. Fontanna, Michigan, executive committee



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WASHINGTON LOOKOUT

By A. G. HALL

Of all the bills considered by the first session of the Eighty-first Congress, which adjourned on October 19, few had any direct effect on the forest situation. Of these, the important measures enacted can be counted on the fingers of one hand.

Marking a new and significant approach to forest fire prevention and control, the President signed, on June 25, Public Law 129, granting the consent and approval of the U. S. Government to an interstate forest fire prevention compact. Ratified by the legislatures of Maine, New Hampshire, Vermont, Connecticut, New York and Massachusetts, the compact provides a method of working toward mutual assistance and a regional fire plan.

An amendment (Public Law 128) to the McSweeney-McNary Law, authorizing and directing a national survey of forest resources, provides for increasing to \$1,000,000 annually the authorization for completion of the survey. Former authorization is \$750,000. For re-surveys and for keeping data currently up to date, \$1,500,000 is authorized. Former authorization for this purpose was \$250,000. Survey data and economic studies resulting from the survey form the basis for federal and state forest policy and for industrial development.

Public Law 348, approved by the President on October 12, sets the stage for a huge reforestation and range revegetation program on the national forests. Funds are authorized for reforestation as follows: \$3,000,000 for 1951; \$5,000,000 for 1952; \$7,000,000 for 1953; \$8,000,000 for 1954; \$10,000,000 for 1955,

and a like amount annually until 1965. For range revegetation: \$1,500,000 for 1951; \$1,750,000 for 1952; \$2,000,000 for 1953; \$2,500,000 for 1954; \$3,000,000 for 1955, and a like amount annually until 1965. Purpose of the law is to provide for the reforestation of 4,000,000 acres of forest land and the revegetation of 4,000,000 acres of range land lying within the national forests.

As the session closed, both houses adopted the conferees' report on H.R. 2296, the Granger bill, to amend the Clarke-McNary Law. Excluded from the bill by the conferees, following the lead of the Senate, was all provision for expanding the farm forestry work now handled under the Norris-Doxey Law. As originally proposed, and as passed by the House, Section 4 of the bill would have transferred farm forestry authority to the Clarke-McNary Law, and would have increased funds for federal-state cooperation in this activity to a maximum of \$6,000,000 by 1952. This provision was eliminated by the Senate. As the bill was finally adopted by both houses it provides for increasing the authorization for cooperative fire control funds from \$9,000,000 to \$20,000,000 by 1955, stepping up each annual authorization by \$2,000,000 until the new ceiling is reached. Cooperative funds for reforestation may be increased from \$100,000 annually to \$2,500,000 by 1953, and planting stock under this program may be provided to non-farm landowners. Formerly the law limited this cooperation to farm ownership. Educational activities in forestry, under the Extension Service, will receive \$500,000 annually instead of the

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The controversial sections on farm forestry having been eliminated from the bill, it is assumed that it will be approved by the President. Representative Granger of Utah, author of the bill, stated on October 18, "It is the intention of the committee to again introduce Section 4 as an individual bill, and we have assurance from certain members of the other body (the Senate) who were opposed to it that they would cooperate with the House in the passage of the legislation."

Senator Anderson's bill for forest regulation was not considered by the Senate Committee on Agriculture.

Presidential veto of the Dingell bill (H.R. 1746) to provide for federal aid to the states in fish restoration and management projects points to a need for a different approach to this problem. This column has been criticized by certain wildlife interests as being opposed to fish restoration programs, because it indicated that fish restoration and management is a problem for the states rather than the federal government (see Letters to the Editor). While President Truman in his veto message conceded "the desirability of federal and state cooperation in the development of fish restoration projects," he expressed belief that enactment of the bill would give impetus to an unsound principle of budgeting.

A somewhat similar question has arisen in regard to the use of ten percent of national forest receipts for recreational purposes in the national forests, proposed in H.R. 2419 by Representative Tackett of Arkansas. Reported favorably by the House Committee on Agriculture and Forestry, the bill was passed over without prejudice on October 17.

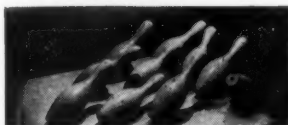
Well along in the fiscal year, both houses finally agreed on an appropriation act for the Department of the Interior. Public Law 350, receiving the approval of the President on October 12, provides: \$2,800,000 for soil and moisture conservation activities throughout the department; \$3,450,000 for management, protection and disposal of public lands; \$50,000 for fire fighting; \$350,000 for range improvements; \$657,000 for management and protection of the reconstituted Oregon and California Railroad and reconveyed Coos Bay Wagon Road grant lands, and \$6,000 for leasing grazing lands—all within the Bureau of Land Management. For management of Indian forest and range resources, \$1,000,000 is provided. The National Park Service receives \$29,450,800.

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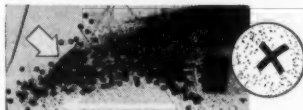
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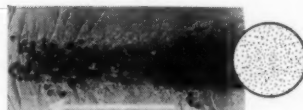
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Let's Outlaw Pollution

(From page 17)

General Assembly of 1947 added \$5,000,000 more. This year \$25,000,000 more was provided.

Under the direction of Admiral Milo F. Draemel, who has been Secretary of Forests and Waters since 1947, a real clean-up of the Schuylkill is on.

With the funds provided by the General Assembly and with the work schedule continuing as now set up and operating, more than twenty-six million tons of silt, culm, and various other components of the pollution of this stream will have been removed by the end of December of next year.

To visualize the magnitude of the silt being removed from this river, it is only necessary to remind you that it would fill 260 thousand railroad cars. That if these cars were placed in separate trains, they would reach across the state of Pennsylvania from Philadelphia in the east to Pittsburgh in the west more than twenty times.

There are places in this stream where the channel, which formerly was from twenty-five to thirty feet deep, has been filled with more than twenty feet of the accumulated culm and filth of the years of continuous pollution.

This stream was tackled first not only because it was our worst polluted big stream but also because it served as the water supply of such a large segment of our population.

In addition to what is being done at the state level, the City of Philadelphia is wholeheartedly and actively collaborating in building interceptor sewer systems and sewage disposal plants to treat all the sewage from that great center of population.

All in all, it seems accurate to say that the reclamation of the Schuylkill

as it is now vigorously going forward is one of the greatest water reclamation projects in the world. It proves beyond peradventure that the job of stream clean-up can be done, because what was said to be impossible is now in process of actual and visible accomplishment.

Moreover, the anthracite coal companies, which were so fearful that the law prohibiting the dumping of coal culm into the river would ruinously increase other costs of production, now find that the installations necessary to secure this result have lowered their costs of production instead of increasing them because they now save thousands of tons of coal formerly lost in their operations.

In this connection, it is important to point out that while this stream clearance program still has the opposition of some industry, on the whole it is actively supported by most of the great industries of the state. They realize the values of better health, improved recreational facilities, better public relations, and the advantages to industry of an improved water supply for their own purposes.

Illustrating a conspicuous example of a fine attitude by a great industry toward the solution of stream pollution may be cited a new \$60,000,000 plant of the United States Steel Corporation at Clairton, above Pittsburgh on the Monongahela River. Under the old method, this plant would pour tons of many kinds of pollution into the river every day. As it is, not a pound finds it way into the stream.

It would be in error to create the impression that we have solved the problem of the pollution of the streams of Pennsylvania. We have not finished the job; we have only begun. But we have made such a beginning and have received such magnificent public support that no body or group of bodies will be powerful enough to stop it.

Somebody said to me—"Governor, how about good water for fish in this program?" My answer to that always is—"If it is good enough for the people of Pennsylvania, the fish will thrive in it." And they can and will, because as pollution is moving out the fish are moving in.

Nothing but indifference will prevent the restoration of one of the priceless heritages of the American people.

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Conservation and Population

(From page 13)

recompense to the land never entered the heads of either partner. . . The price that has been and still must be paid, in soil and social security, prosperity, health and contentment and aesthetic value that go with it, for the outward show of civilization and wealth, is incalculable."

We now find Europe overpopulated. We also find that in the short history of this country it has lost the equivalent of one third of its original topsoil, four fifths of its standing saw-timber, and many of its mineral and wildlife resources are nearing depletion.

And these great losses still continue. In spite of advancement in science and increased expenditures by government, most of these losses are continuing at an accelerated rate.

The point I should like to emphasize is that much of this great loss was unnecessary. No doubt some losses were unavoidable and others were justifiable in order to build up an adequate population in the United States. The unnecessary waste of our natural resources seems to have been caused by the hasty manner in which we had to exploit our country to support rapidly increasing population both in Europe and America.

Professor P. K. Whelpton, a population authority for the last three Administrations, has pointed out that the population of the United States already has increased beyond its economic optimum. And, according to American standards, the population of Europe is twice as large as it should be for health and efficiency.

Resting the land or introducing soil-restoring crops is a basic factor in any efficient program of soil conservation, but we are told in the *Report on Economic Conditions of the South*, prepared by the National Emergency Council in 1938, that the farms of the southeastern states average seventy-one acres and that nearly one fourth of these farms are smaller than twenty acres. Then this report goes on to say: "A farmer with so little land is forced to plant every foot of it in cash crops; he cannot spare an acre for soil-restoring crops on pasture."

Yet it is among such poor farmers, not only in the southeastern states but throughout the whole nation, that our education concerning population problems is the least understood. According to the report of the committee on population problems of the

Natural Resources Committee, the net reproduction rate in such areas is so high that it would cause a doubling of the population in a period of less than thirty years. And, as we have seen from the British Royal Commission on Population, a population doubling at this rate would increase a thousand-fold in 300 years.

Thus in the interests of security and progress, a program of population education must accompany a program concerning the use of the forests, the soil, and other natural resources.

What are we seeking in conservation? We are seeking healthy, prosperous and happy people. If we are to be successful we must never lose sight of this goal.

The chemist tells us he can make food from such raw materials as wood and coal. But how is this food going to affect the health and happiness of people? Can he also make the many other necessities of life that must go along with the food? And even if he can do this, can he keep pace with population growth? If it is theoretically possible to produce food from wood and coal, it also is theoretically possible for population to double in less than thirty years or increase a thousand-fold in 300 years. And science has not as yet even caught up with healthfully feeding two thirds of the earth's people who are now chronically undernourished.

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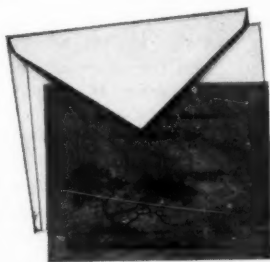
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The Red Atom

(From page 8)

A-Day arrived, our economy could not stand the immediate expenditure of all the moneys necessary to provide for the atomic defense of this continent, our timetable calls for the spreading out of these expenditures in an orderly progression over a period of years. The people and the Congress will be asked to provide for those items essential to the orderly implementation of these security measures.

These requests may cut across preconceived notions of defense, and tread on many toes. It will take unselfish and objective study to arrive at the best protective measures for the over-all good of the country. And we must continue to provide even these new requirements out of a limited arms budget, while our economy continues to strengthen. For a strong economy is our best resource against the onslaught of the poison of communism.

If our plea for the international control of atomic energy is heeded, any attempt to overrun Europe will first touch the point of allied bayonets in Germany. If this becomes the case, then the Army must be ready to repel a land assault, with sufficient tactical air power to gain and maintain local superiority over Red bombers and fighters.

If our pleas for control of atomic energy are *not* met with honest agreement, then the blow may strike at the heart of industrial America. If that is the case, we may have to invest our funds in anti-aircraft guided missiles, necessary radar screen for Canada and the United States and the Arctic, and the necessary fighter interceptor squadrons to dispel long-range bombardment attack.

In either situation, our Navy must maintain control of the seas. It possesses that power of control today. Our collective defensive frontiers in the heart of Europe need the support of American industry and arms; we must deny any aggressor close bases for attack against this continent.

I believe that our present investments have been neither misplaced, nor less thrifty than we should desire. The forces to avert disaster have been allotted most of our available funds, including the budget recommendation for 1950. This reaffirms the statement of the Secretary of Defense that there need be no change in our basic defense plans. And the orderly implementation of our next timetable program will also reaffirm this view.

Within this pattern of security, the Army, the Navy, and the Air Force have been assigned roles and responsibilities. Their leaders are responsible and earnest men, each seeking to carry out his mission at maximum efficiency. Naturally, each proponent of his service will seek as great a percentage of the defense dollar as he can get. Estimating the total problem and then turning to his specific task, he realizes that there will never be enough money to go around. Defensewise, he is dealing in dollar deficits.

The American people have decided that they can get the maximum security out of each dollar through a unified effort, and have so organized the Department of Defense. Encouraged by the great accomplishments of teamwork from earliest Colonial times to the latest developments in modern industry, Americans are convinced that efficiency and accomplishment go hand in hand with teamwork. Within this organization, we of the Joint Chiefs of Staff hope to provide relative security within decreasing defense appropriations. It is not going to be easy. In the complexity of defense planning, the division of the defense dollar undoubtedly will continue to be a very serious bone of contention among the services.

With the unification machinery only two years old, you can hardly expect earnest and sincere citizens, faced with the grave responsibility of protecting our people with fewer funds than are considered necessary, to agree on budget division.

I believe the American people would not want it otherwise, for in this spirit of competition is born the close examination of expenditures that assures no waste and maximum security.

But finally, when the President and the Secretary of Defense have made the decision of the defense budget, then each service must carry its fair share of our calculated risk.

As we began this discussion of the defense problems facing the American people, I told you how the defense dollar has been divided for 1950. I expect that a tally of estimates made by you in this matter would reveal no two of them alike. But after careful consideration of the priorities, and commitments, and with the full knowledge that the timetable for the second phase of anti-atomic peace is underway, I am sure that collectively, we would arrive at a good solution.

The people of the United States have twice affirmed, through their elected representatives, that the maximum security at least cost can be provided through unity in planning and command. And the Congress has recently pointed out that our defense plans must be closely related to those of our allies, if funds are to be granted.

I firmly believe that unity of effort, both nationally and internationally, can produce the greatest security for all of us; that unity of effort and common ideals of humanity can negate the Red Atom; and that, ultimately, Americans shall lead the way steadfastly to a lesser possibility of war for our children, and the world we are building for the future.

Conservation and Business

(From page 38)

be so close to the trees of immediate sales they cannot see the forest of future volume. Management, therefore, has the responsibility of making known to its organization where it stands on conservation of natural renewable resources. When this is done, a substantial number of employees all the way down the line will take an interest in promoting conservation.

When management of all kinds of business—transportation, processing, manufacturing, financing, wholesal-

ing, retailing, publishing, commerce, public utilities such as power, light and telephone, the professions and many other human activities—appreciates what conservation means to business, money spent on conservation activities will not be considered contributions to a worthy cause, but rather an investment in current and future business — especially future business.

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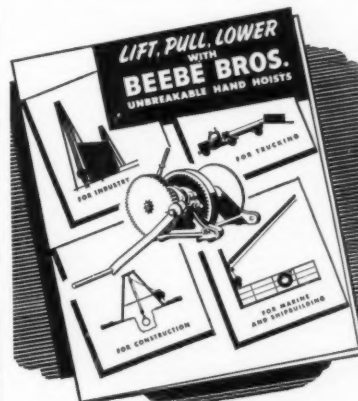
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The Case for a Department of Natural Resources

(From page 25)

stated objectives in terms of forest and range resources indicates that the proposed reorganization of the Department of Agriculture will naturally continue to emphasize service to the farm population. A particular clientele is served as well as the nation. On the other hand, while a Department of Natural Resources will be exposed to pressure groups, there will be no particular obligation to any one group. The latter department will be in a better position to maintain the national and long range interest in conservation and development of these and other natural resources.

The American people cannot readily be aware of and assume the necessary degree of mature responsibility toward the conservation and development of their natural resources until there is one definite executive department of the government which can be held accountable to them as a whole for its policies and programs relating to the discovery, development, use and conservation of such resources.

Perhaps not in an absolute sense but in general, the kind of a job which the proposed Natural Resources Department would perform is quite different from that performed by the Department of Agriculture. The proposed Natural Resources Department would be doing a resources management job while the Department of Agriculture in accord with its traditional role of supplying services would be called upon to service the resource management agencies in the Natural Resources Department.

It is true that the evidence drawn from program operating experience points to a close link between public wild land management and the Department of Agriculture. However, the Department of Agriculture apart from the Forest Service and the temporary sub-marginal land activity of the Soil Conservation Service, is not a management agency. It is primarily an agency rendering many different types of service to farmers. Even the regulatory functions of the Department of Agriculture are in a real sense services to the farm population.

Here I would like to point to what appeals to me as a major inconsistency in the proposal (made by the Hoover Commission) that the major functions of the Bureau of Land Management, now in the Department of the Interior, be transferred to the Department of Agriculture and there made a part of a "Forest and Range

Service." This, as may be readily seen, would have the effect of separating the land from the water, speaking in terms of administration.

It was recommended by all the Hoover task forces concerned, and accepted by the Commission, that the civilian activities of the Army Corps of Engineers be merged with the Bureau of Reclamation in one "Water Development and Use Service." Space does not permit me to go into the discussions which led up to this recommendation, but mention should be

TOWER GIRL



Atop her tower at South Mills, North Carolina, overlooking the Great Dismal Swamp, pretty nineteen-year-old Claudine Jones does a good job of spotting, plotting and reporting forest fires in between intermittent "buzzings" by a pilot admiral and "skinning down the tower when the lightning gets rough."

Claudine, who also helps her father run a crossroads store in winter, decided she would like to be a regular tower watcher two years ago.

The one thing that gets her is that lightning. When streaking bolts start playing ring-around-the-rosy with her tower, Claudine descends.

"That's when this becomes a man's job," she says.

made of the insistently growing thought that sound conservation demands more attention be given to works in the upper reaches of our drainage systems—that means largely upon the public domain and in the national forests. To say that adequate and efficient conservation would be practiced in those areas by two cabinet level agencies working under differing fundamental concepts as to water, timber and soil uses and requirements seemed to our Task Force to be entirely out of harmony, and our views were supported in a strongly worded dissent filed by a minority of the Commission.

It is questionable whether the development of the forest and forage resources of the public domain and of private commercial forestry apart from farm woodlots should be combined departmentally with the promotion of agriculture. Our natural resources are presumably held and developed for all classes of people and areas—city population as well as rural. It is important that adequate representation of diversified interests be attained and that where diverse or conflicting major purposes are involved that there be an opportunity for departmental presentation. Both the agricultural population and our natural resources, including forest and forage resources of the public domain, need the prestige of cabinet consideration to represent adequately the diversified interests involved in their conservation and development.

Analysis of the farm forestry problem with reference to its weight as an influence upon the placement of the forest and range management agency discloses that while both range and forest resources may reasonably be considered as crops, particularly as they apply to farming operations, the management of timber resources either public or private apart from farms is a vastly differing problem. It does not seem reasonable to contend that since there is a need for a farm forestry program the entire forestry activity of the federal government be centered in a Department of Agriculture. This amounts to the tail wagging the dog.

To illustrate the over-emphasis of this line of argumentation, five sixths of the funds appropriated for the Forest Service for the fiscal year 1949 were for the conservation and development of the public forest and grazing lands administered by that agency. One sixth was for the farm forestry program.

Farm forestry is basically a farm problem, whereas commercial forestry and management of public forest lands is a different problem—the first definitely ties in as a responsibility of a Department of Agriculture, the second does not.

The farm forestry program itself has failed to catch on with farmers in the degree which might have been expected. This is largely because the concept of the organization responsible for the national forestry program has been too much in terms of commercial forest management enterprise rather than in terms of farm opera-

tion. Farm forestry must be considered in terms of over-all farm planning rather than in terms of growing trees as a commercial enterprise.

It is erroneous to think of farm woodlots as containing thirty percent of the nation's commercial forest land. Farmers do operate farms which contain about 140 million acres of land covered with woods, but until it can be established that a wood crop will contribute more to farm economy than other crops that might be grown on forested acres—crops with which the farmer is already familiar—we are ignoring the facts to assume that the farm woodland area is a part of the permanent timber growing land of this country.

Farmer ownerships of woodland are not brought about by design but are accidental, and therefore farmers are not obligated and frequently are not inclined to grow wood as a crop. Farm forestry can only succeed as a program as the farmer accepts a farm enterprise where forestry serves him in exactly the same manner as does agronomy, animal husbandry, or horticulture. Farm forestry promotion should be done at the farm planning level of the Department of Agriculture's activity. Forestry integrated with the farm business must provide an annual income. If farm forestry is conceived in terms of production of forest crops on a commercial basis, income is too intermittent.

The wording and philosophy of the report of the Natural Resources Committee suggests that it would be logical where practicable to place federal responsibility for leadership in the forest, forage, fish, and wildlife resource fields in the same department that is responsible for the management of these resources on the public domain. However, there is no intention of establishing a western Department of Agriculture nor to take over those services of the Soil Conserva-

tion Service and the Production and Marketing Administration which pertain to private forage lands in the West, or of all research on forage and all educational services pertaining to private forage lands.

Rather it is the intention of the committee that the major responsibility and the bulk of the activity of the forest and range management service will be the administration of responsibilities on federally owned lands. However, it is intended that the proposed forest and range management service continue the research and educational activity now carried on by the Forest Service and that it will work very closely with and through the appropriate agencies in the Department of Agriculture providing conservation services and information to ranchers grazing stock on public and private lands within the watersheds under its jurisdiction.

Inevitably any organization which manages the public forest and range lands in the western states is going to have a profound effect upon the agriculture of the region, since the setting of grazing capacities and the installation or lack of installation of improvements on the public range will go a long way in determining the manner of improvements made and degree of stocking pursued on private lands used in conjunction with the public range. Conservation planning necessarily has to be a joint enterprise between the Department of Agriculture and the Department of Natural Resources in order that local short term interests will not adversely affect long term national interests in the use of the land.

Regardless of what finally may be the administrative methods employed, our future economic well-being calls for thoughtful and decisive action in the broad field of water, soil, and forest conservation now—fifty years hence may be too late.

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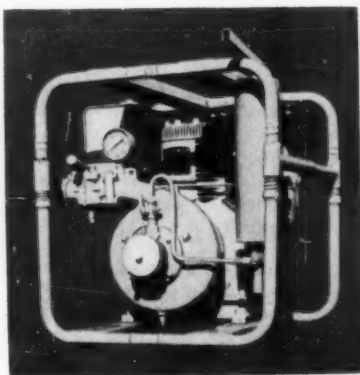
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EDITORIAL

The Kind of Conservation Business Understands

One reason—perhaps the most important one—we have not been more successful in our efforts to bring about better land use is a tendency on the part of conservation organizations in general to become so absorbed in their “cause” that they lose sight of what happens to citizens once they are indoctrinated. They fail to grasp that the job of applying what they preach begins where the “cause” leaves off.

There is, of course, some justification for this. The average American is fundamentally a sentimentalist, a do-gooder at heart, and will reach into his pocketbook to aid almost any “cause” that plays upon his emotions. The conservation movement grew to its present stature on the wings of this appeal—and so long as there is a natural love of the land in the hearts of people they will respond first through their emotions.

But when it comes to getting the conservation job done today, facts rule, not sentiment. Hard, cold facts that speak in terms of dollars, not duty. Facts that spell economic strength through new wealth, new business opportunities, stabilized payrolls, better health, greater security and a higher standard of living. It is one thing to rally support, but quite another to mold this interest into tangible, direct lines of action. That the conservation movement generally has been weak in this respect is due undoubtedly to a faulty appraisal of the temper of the American people. By and large, their conditioning period is over; it is time now to concentrate on realization of the objectives they have been asked to support.

The 68th annual meeting of The American Forestry Association held in the Ohio Valley October 10 to 13, gave conclusive testimony to this fact. With their stage the Muskingum Watershed Conservancy District, outstanding example of what public interest translated into action at the community level can do, leaders from a cross-section of American life talked of projects, not of “cause”—and in language equally understandable to the businessman as to the layman.

For example, General Omar N. Bradley, chairman of the Joint Chiefs of Staff, making a major policy speech on our position now that Russia, too, has an atom bomb, forthrightly declared that our best resource “against the onslaught of the poison of communism” is a strong economy. Since the General knows, as any thinking citizen knows, that a nation’s economy can be only as strong as its basic resource wealth, his statement, in effect, is a warning that security demands a more realistic attitude toward the management and use of our soil, water, forests and other renewable resources.

How this can be achieved in terms of specific projects is thoroughly covered elsewhere in this issue. One approach, however, deserves special attention inasmuch as it takes conservation to the very core of our economic structure—American business. The fact that sixty-five percent of all new wealth created in this country has its origin in agri-

cultural and forest production—from renewable resources—would seem in itself sufficient cause for every business and every businessman to be gravely concerned with the conservation problems involved in maintaining agricultural and forest lands in high productivity. That this is not the case reflects, in part at least, our ineptness in getting a realistic conservation story over to business—the tendency to talk “cause” when we should talk facts.

F. A. Wirt, advertising manager of the J. I. Case Company of Racine, Wisconsin, clearly demonstrated this at the Ohio Valley conference. In an address directed to American business, he got right down to cases—hard, cold facts that speak in terms of dollars and cents. For example:

The national income from natural resources by industrial origin in 1948 amounted to \$27,000,000,000. Agriculture, forestry and fisheries accounted for \$22,000,000,000, or eighty percent of the total.

Or to put it another way, the number of trucks engaged in hauling agricultural commodities is greater than the number used for all other purposes. “Consider,” he reminded, “what this means to highway construction, filling stations, garages, restaurants and many other kinds of business.”

The story of the 200,000,000 acres of farm land now out of production or severely damaged because of excessive erosion was translated for the businessman in these words: “The 1949 wheat crop, one of the largest on record, was harvested from 75,000,000 acres, producing 1,100,000,000 bushels. The huge 1949 corn crop was grown on 85,000,000 acres with an estimated yield of 3,500,000,000 bushels. Contrast this with 100,000,000 acres of formerly cultivated land now gone, and then by another 100,000,000 acres partly gone.”

In a word, said Mr. Wirt, conservation offers business the kind of opportunities that business understands—essential materials from farm and forest, customers with greater ability to buy, happier, more productive employees, more satisfactory returns to stockholders and success to management. Once the facts are known, business not only will expand these opportunities, but will accept the responsibility that goes with them.

“When management of all kinds of business—transportation, processing, manufacturing, financing, wholesaling, retailing, publishing, commerce, public utilities such as power, light and telephone, the professions and many other human activities—appreciates what conservation means to business, money spent on conservation activities will not be considered contributions to a worthy cause, but rather an investment in current and future business.”

Once conservation in America gets on this basis, not only will we deliver to General Bradley a strong economy to meet the Red Atom threat, but we will have established a sound and permanent base upon which to build for continuing happiness and prosperity.

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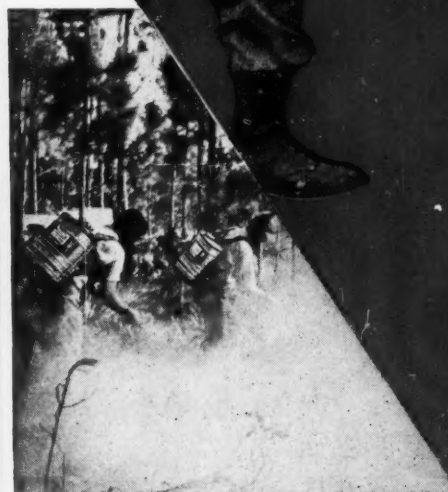
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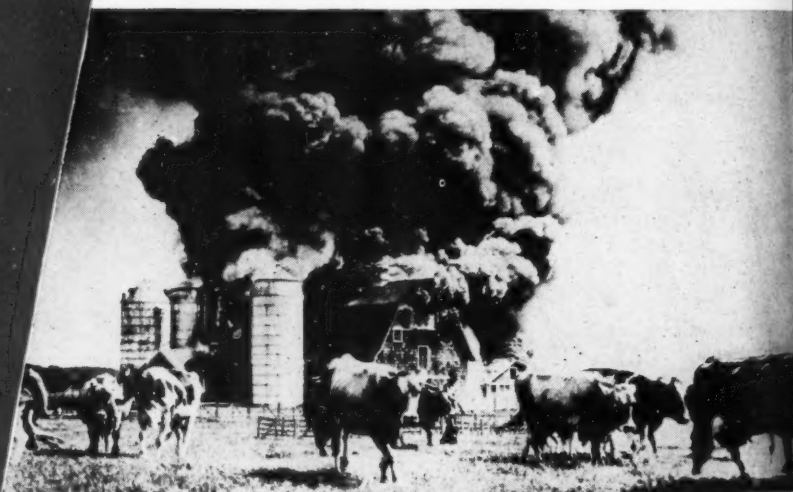


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